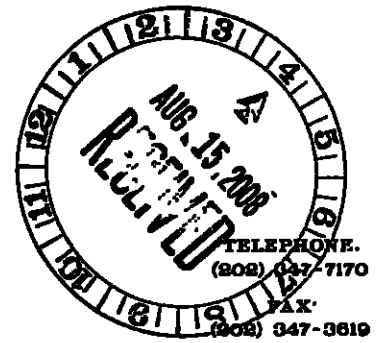


WILLIAM L SLOVER  
C MICHAEL LOFTUS  
JOHN H LE SEUR  
KELVIN J DOWD  
ROBERT D ROSENBERG  
CHRISTOPHER A MILLS  
FRANK J PERGOLI721  
ANDREW B KOLESAR III  
PETER A PFOHL  
DANIEL M. JAFFE  
STEPHANIE P LYONS  
JOSHUA M HOFFMAN

OF COUNSEL  
DONALD G AVERY

**SLOVER & LOFTUS**  
ATTORNEYS AT LAW  
1224 SEVENTEENTH STREET, N. W  
WASHINGTON, D. C. 20036-8003



WRITER'S E-MAIL:

jhl@sloverandloftus.com

August 15, 2008

ENTERED  
Office of Proceedings

AUG 15 2008

Part of  
Public Record

223290

The Honorable Anne K. Quinlan  
Acting Secretary  
Surface Transportation Board  
395 E Street, SW  
Washington, D.C. 20423-0001

Re: Docket No. 42088, *Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc v BNSF Railway Co*

Dear Ms. Quinlan:

Enclosed for filing **UNDER SEAL** please find an executed original and twenty (20) copies of the Third Supplemental Rebuttal Evidence of Complainants Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc.

Also enclosed are an original and ten (10) copies of the Public Version of Complainants' Third Supplemental Rebuttal Evidence, and three copies of a compact disc containing the filing and accompanying workpapers. The disc is designated as Highly Confidential.

Please date stamp the extra copy of this cover letter and the enclosed pleading and return it to our messenger. Thank you for your attention to this matter.

Respectfully submitted,

John H. LeSeur  
An Attorney for Complainants

JHL:cef  
Enclosures  
cc: Counsel for Defendant BNSF Railway Co.

**PUBLIC VERSION**  
**CONFIDENTIAL MATERIAL HAS BEEN REDACTED**

**BEFORE THE**  
**SURFACE TRANSPORTATION BOARD**



---

WESTERN FUELS ASSOCIATION, INC.  
and BASIN ELECTRIC POWER  
COOPERATIVE, INC.

Complainants,

v.

BNSF RAILWAY COMPANY

Defendant.

---

ENTERED  
Office of Proceedings

AUG 15 2008

Part of  
Public Record

Docket No. 42088

223290

**THIRD SUPPLEMENTAL REBUTTAL**  
**EVIDENCE OF COMPLAINANTS**  
**WESTERN FUELS ASSOCIATION, INC. AND**  
**BASIN ELECTRIC POWER COOPERATIVE, INC.**

**NARRATIVE**

WESTERN FUELS ASSOCIATION, INC.  
and BASIN ELECTRIC POWER  
COOPERATIVE, INC.

OF COUNSEL:

Slover & Loftus  
1224 Seventeenth Street, N.W.  
Washington, D.C. 20036

By: John H. LeScur  
Christopher A. Mills  
Peter A. Pfohl  
Daniel M. Jaffe  
1224 Seventeenth Street, N.W.  
Washington, D.C. 20036  
(202) 347-7170

Dated: August 15, 2008

Attorneys for Complainants

## **TABLE OF CONTENTS**

<b>ACRONYMS .....</b>	<b>viii</b>
<b>CASE GLOSSARY .....</b>	<b>x</b>
<b>I. COUNSEL’S ARGUMENT AND SUMMARY OF EVIDENCE .....</b>	<b>1-2</b>
<b>A. PREFACE .....</b>	<b>1-2</b>
<b>B. WFA/BASIN COMPLIED WITH THE BOARD’S DIRECTIVES IN MODELING THE REVISED LRR .....</b>	<b>1-10</b>
1. The Board’s Instructions Were Clear .....	1-11
2. WFA/Basin Followed the Board’s Instructions .....	1-12
3. BNSF’s Assorted Contentions to the Contrary Are Wrong ....	1-14
a. WFA/Basin Did Not Present A New SAC Case .....	1-14
b. WFA/Basin Did Not Group Traffic Impermissibly .....	1-15
c. WFA/Basin Did Not Impermissibly Exclude Traffic ...	1-18
d. WFA/Basin Did Not Impermissibly Add Traffic .....	1-20
i. The Board’s Instructions Permit WFA/Basin to Add Traffic .....	1-20
ii. WFA/Basin Met the Board’s Standards for Inclusion of Rerouted Traffic .....	1-23
iii. The Board’s Simplified SAC Standards are Not Applicable .....	1-26
c. WFA/Basin Are Following the Rules, Not Gaming Them	1-28
f. Due Process Precludes Arbitrary Grouping Limitations .	1-30
g. The Board Should Deny BNSF’s Dismissal Request ...	1-31
<b>C. WFA/BASIN CORRECTLY CALCULATED THE REVISED LRR’S TRAFFIC VOLUMES AND REVENUES .....</b>	<b>1-31</b>
1. BNSF Accepts WFA/Basin’s Traffic Volume Calculations ...	1-31
2. WFA/Basin Developed Traffic Revenues In Accordance With The Board’s Instructions and Governing Board Precedent, But BNSF Did Not .....	1-32
3. The Board Should Reject BNSF’s Rerouted Traffic Revenue Adjustment .....	1-34
4. The Board Should Reject BNSF’s Contribution Adjustment ...	1-35
5. The Board Should Reject BNSF’s Density Adjustment .....	1-36
6. WFA/Basin Should Not Be Penalized For Following the Rules	1-37

<b>D.</b>	<b>WFA/BASIN HAVE CORRECTLY CALCULATED THE REVISED LRR's OPERATING EXPENSES AND ROAD PROPERTY INVESTMENT COSTS .....</b>	<b>1-37</b>
1.	WFA/Basin Properly Designed the Revised LRR System .....	1-38
2.	WFA/Basin's Operating Plan Is Fully Supported and Its Calculation of the Revised LRR's Operating Expenses Is Correct .....	1-39
3.	WFA/Basin Has Correctly Calculated the Revised LRR's Road Property Investment Costs .....	1-41
<b>E.</b>	<b>THE BOARD SHOULD CALCULATE THE REVISED LRR's CAPITAL COSTS USING CAPM .....</b>	<b>1-42</b>
1.	The Board Clearly Has the Legal Authority To Adopt the All CAPM Method .....	1-43
2.	Application of the All CAPM Method Produces The Most Accurate Results .....	1-47
3.	The Board's Use of the All CAPM Method Will Not Disrupt Settled Expectations and Cause Disinvestment In the Rail Industry .....	1-50
4.	Use of the All CAPM Method Is Consistent With Board Precedent .....	1-52
5.	The Board's Hybrid Method is the Next Best Approach .....	1-54
6.	WFA/Basin Properly Used CAPM To Make Related SAC Calculations .....	1-56
<b>F.</b>	<b>WFA/BASIN ARE ENTITLED TO SUBSTANTIAL RATE RELIEF .....</b>	<b>1-57</b>
1.	The Board Should Reject BNSF's Length of Haul Adjustment to MMM .....	1-58
2.	WFA/Basin is Entitled to Full Prescriptive and Reparations Relief .....	1-61
a.	Arizona Grocery Does Not Preclude Full Relief .....	1-61
b.	Full Relief Is Not Barred By Limitations Periods .....	1-64
c.	Full Reparations Are Required .....	1-67
d.	The Prescription Period is Twenty Years .....	1-71
e.	The Board Should Prescribe a Single Weighted-Average Rate .....	1-71
f.	Full Relief Must Not Be Nullified .....	1-72
<b>E.</b>	<b>CONCLUSION .....</b>	<b>1-73</b>

<b>II.</b>	<b>A.</b>	<b>QUANTITATIVE MARKET DOMINANCE</b>	<b>II-A-1</b>
<b>III.</b>	<b>A.</b>	<b>TRAFFIC GROUP</b>	<b>III-A-1</b>
	1.	Stand-Alone Railroad Traffic	III-A-1
	a.	New SAC Case Claims	III-A-1
	b.	Traffic Exclusion Claims	III-A-3
	c.	Rerouted Traffic Claims	III-A-9
	i.	The Board's Instructions	III-A-9
	ii.	The <u>PPL</u> Case Instructions	III-A-11
	iii.	Gaming Contentions	III-A-15
	iv.	The Board's Standards For Inclusion of Rerouted Traffic	III-A-20
	2.	Volumes (Historical and Projected)	III-A-23
	3.	Revenues (Historical and Projected)	III-A-24
	a.	Single Line	III-A-26
	b./c.	Divisions - Existing Interchanges; Divisions - Cross-Over Traffic	III-A-26
	i.	Collateral Challenges Will Not be Considered	III-A-28
	ii.	Rerouted Traffic Revenue Adjustment	III-A-30
	iii.	Density Adjustment	III-A-31
	iv.	AIC Application	III-A-35
	v.	CAPM	III-A-36
	d.	Other – Revenue Results	III-A-36
<b>III.</b>	<b>B.</b>	<b>STAND-ALONE RAILROAD SYSTEM</b>	<b>III-B-1</b>
	1.	Route and Mileage	III-B-1
	a.	Route Miles	III-B-1
	b.	Track Miles	III-B-3
	2.	Yards	III-B-3
	3.	Other	III-B-4
<b>III.</b>	<b>C.</b>	<b>OPERATING PLAN</b>	<b>III-C-1</b>
	1.	General Parameters	III-C-1
	a.	Traffic Flow and Interchange Points	III-C-2
	i.	Interchange Procedures at Northport	III-C-3
	ii.	LRR Train Dwell Times at Northport	III-C-5

	(1)	Southbound Loaded Trains Interchanged with BNSF .....	III-C-5
	(2)	Northbound Loaded Trains Interchanged with BNSF .....	III-C-10
	(3)	Trains Interchanged with UP .....	III-C-12
b.		Track and Yard Facilities .....	III-C-14
c.		Trains and Equipment .....	III-C-14
2.		Cycle Times and Capacity .....	III-C-16
a.		Inputs to the RTC Model .....	III-C-17
	i.	Configuration (Track) Inputs .....	III-C-17
	ii.	Random Outages .....	III-C-18
	iii.	Handling of Loaded Trains in Orin Yard ....	III-C-19
	iv.	Crew Districts as they Affect Loaded Train Dwell Time at Orin Yard .....	III-C-20
	v.	Train Dwell Times at Northport .....	III-C-24
	vi.	Coding Issues .....	III-C-24
b.		Results of the Rebuttal RTC Simulation .....	III-C-25
3.		Rerouted Traffic .....	III-C-27
4.		Other .....	III-C-28
a.		Vehicular Access to Both Sides of Orin Yard .....	III-C-28
b.		Locomotive Fueling at Orin Yard .....	III-C-30

### **III. D. OPERATING EXPENSES .....** III-D-1

1.		Locomotives .....	III-D-2
a.		Ownership and Maintenance Expenses .....	III-D-2
b.		Operating Expenses .....	III-D-3
2.		Railcars .....	III-D-6
3.		Personnel .....	III-D-7
a.		Train Crew Personnel .....	III-D-7
b.		Non-Train Operating Personnel .....	III-D-8
4.		Maintenance-of-Way .....	III-D-10
a.		Field Track Forces .....	III-D-12
b.		Signals and Communications .....	III-D-17
	i.	Signal Maintainers .....	III-D-19
	ii.	Communications .....	III-D-20
c.		Purchasing .....	III-D-22
d.		Small Tools Additive .....	III-D-25
e.		Equipment .....	III-D-25
f.		Contract Services .....	III-D-26
g.		Summary .....	III-D-26
5.		Leased Facilities .....	III-D-27
6.		Loss and Damage .....	III-D-27

	7.	Insurance .....	III-D-28
	8.	Ad Valorem Tax .....	III-D-29
<b>III.</b>	<b>E.</b>	<b>NON-ROAD PROPERTY INVESTMENT .....</b>	<b>III-E-1</b>
<b>III.</b>	<b>F.</b>	<b>ROAD PROPERTY INVESTMENT .....</b>	<b>III-F-1</b>
	<b>SUBPART I</b>	<b>ORIN YARD INVESTMENT COSTS .....</b>	<b>III-F-2</b>
	1.	Vehicular Access Between the South and North Sides of the Yard .....	III-F-4
	2.	ROW and Facilities to Accommodate and Access the Car Shop .....	III-F-5
	3.	ROW for Buildings .....	III-F-6
	4.	Replacement of Proposed Culverts with Bridges .....	III-F-6
	5.	Railroad Bridge and Access Road to the Locomotive Shop Area .....	III-F-11
	6.	Crossing Materials In the Orin Yard .....	III-F-11
	<b>SUBPART II</b>	<b>ITEMIZED RESPONSES TO BNSF'S TS REPLY EVIDENCE .....</b>	<b>III-F-12</b>
	1.	Land .....	III-F-12
	2.	Roadbed Preparation .....	III-F-12
	a.	Earthwork for Mainline Tracks .....	III-F-12
	b.	Culverts .....	III-F-13
	3.	Track Construction .....	III-F-13
	4.	Tunnels .....	III-F-14
	5.	Bridges .....	III-F-14
	a.	Bridge Types .....	III-F-14
	b.	Bridge Inventory .....	III-F-15
	c.	Highway Overpasses .....	III-F-15
	6.	Signals and Communications .....	III-F-15
	7.	Buildings and Facilities .....	III-F-16
	8.	Public Improvements .....	III-F-16
	a.	Fencing .....	III-F-16
	b.	At-Grade Crossings .....	III-F-17
	c.	Signs and Road Crossing Devices .....	III-F-17
	9.	Mobilization .....	III-F-17
	10.	Engineering .....	III-F-18
	11.	Contingencies .....	III-F-18
	12.	Other .....	III-F-18
	a.	Construction Time Period .....	III-F-18

<b>III. G.</b>	<b>DISCOUNTED CASH FLOW ANALYSIS</b>	<b>III-G-1</b>
1.	Cost of Capital	III-G-1
a.	Computations Using The All CAPM Method	III-G-1
i.	Restated Industry Computations	III-G-1
ii.	Restated LRR Computations	III-G-3
b.	Calculations Using the Single-Stage DCF Method	III-G-5
c.	Calculations Using the Board's Hybrid Approach	III-G-7
d.	The Correct Approach – WFA/Basin's CAPM Calculations	III-G-9
i.	Legal Authority	III-G-9
ii.	Accuracy	III-G-10
iii.	Finance Experts	III-G-13
e.	The Next Best Approach – WFA/Basin's Hybrid Method Calculations	III-G-17
<b>III. H.</b>	<b>RESULTS OF SAC ANALYSIS</b>	<b>III-H-1</b>
1.	DCF Analysis	III-H-1
2.	DCF Results	III-H-1
3.	LRR SAC Rates	III-H-2
a.	Rerouted Traffic Adjustment	III-H-3
b.	Length of Haul Adjustment	III-H-4
i.	Changes in Individual Cases	III-H-5
ii.	Rationale	III-H-6
(a)	STB Consideration	III-H-7
(b)	Demand-Based Pricing	III-H-8
(c)	Profitability of Short-Haul Movements	III-H-8
(d)	Opportunity Costs	III-H-11
(e)	Punishment Contentions	III-H-14
iii.	Detailed Procedures	III-H-16
(a)	Regression Analysis	III-H-17
(b)	Regression Application	III-H-20
(i)	Regression Controls	III-H-22
(ii)	Median Milcage	III-H-23
(iii)	Extrapolation of Regression Results	III-H-24
(iv)	Variable Cost Adjustments	III-H-27
(v)	Consistency of Results with the Long-Cannon Factors	III-H-28
4.	Maximum Rates	III-H-30
a.	Reparations Time Period	III-H-30
b.	Prescription Time Period	III-H-31



i.	Traffic Growth Patterns .....	III-H-33
ii.	Changes in SAC .....	III-H-34
iii.	Alternative Forecast Scenarios .....	III-H-37
iv.	Taxes .....	III-H-38
c.	Amount of Relief .....	III-H-39
d.	Use of Average Rates .....	III-H-41
i.	Proper MMM Procedures .....	III-H-42
ii.	Shipping Patterns .....	III-H-46
iii.	Impact on BNSF .....	III-H-47
iv.	Jurisdictional Threshold .....	III-H-49
v.	Reparations .....	III-H-50
e.	4Q04 Maximum Rates .....	III-H-51
f.	4Q04 Reparations .....	III-H-52
g.	Post-4Q04 Rates and Reparations .....	III-H-52

#### **IV. WITNESS QUALIFICATIONS AND VERIFICATIONS ..... IV-**

## **ACRONYMS**

The following acronyms are used:

<b>AAR</b>	<b>Association of American Railroads</b>
<b>AEI</b>	<b>automatic equipment identification scanner</b>
<b>AEO</b>	<b>Annual Energy Outlook (published by EIA)</b>
<b>ATC</b>	<b>Average Total Cost methodology</b>
<b>ATF</b>	<b>across-the-fence</b>
<b>Basin</b>	<b>Basin Electric Power Cooperative, Inc.</b>
<b>BNSF</b>	<b>BNSF Railway Company, f/k/a The Burlington Northern and Santa Fe Railway Company</b>
<b>CAPM</b>	<b>Capital Asset Pricing Model</b>
<b>CNW</b>	<b>Chicago and North Western Railway Company</b>
<b>CTC</b>	<b>centralized traffic control system</b>
<b>CWR</b>	<b>continuous welded rail</b>
<b>CY</b>	<b>cubic yards</b>
<b>DCF</b>	<b>discounted cash flow</b>
<b>DP</b>	<b>distributed power (type of locomotive configuration on a train)</b>
<b>DTL</b>	<b>direct-to-locomotive (fueling)</b>
<b>EIA</b>	<b>Energy Information Administration, U.S. Department of Energy</b>
<b>FED</b>	<b>failed equipment detector</b>
<b>FRA</b>	<b>Federal Railroad Administration</b>
<b>G&amp;A</b>	<b>general and administrative</b>
<b>GWR</b>	<b>gross weight on rail</b>
<b>IBES</b>	<b>Institutional Brokers Estimate System</b>
<b>ICC</b>	<b>Interstate Commerce Commission</b>
<b>IT</b>	<b>information technology</b>
<b>JT</b>	<b>jurisdictional threshold</b>
<b>LRR</b>	<b>Laramie River Railroad</b>
<b>LRS</b>	<b>Laramie River Station</b>
<b>LUM</b>	<b>locomotive unit-mile</b>
<b>Means</b>	<b>R.S. Means (engineering unit-cost reference guide)</b>
<b>MOW</b>	<b>maintenance-of-way</b>
<b>MP</b>	<b>milepost</b>
<b>MMM</b>	<b>Maximum Markup Methodology</b>
<b>MSP</b>	<b>modified straight-mileage prorate</b>
<b>NPR</b>	<b>notice of proposed rulemaking</b>
<b>O/D</b>	<b>origin/destination</b>

<b>PRB</b>	<b>Powder River Basin of Wyoming</b>
<b>R-1</b>	<b>Annual Report Form R-1</b>
<b>RCAF-U</b>	<b>rail cost adjustment factor, unadjusted for changes in productivity</b>
<b>ROW</b>	<b>right-of-way</b>
<b>R/VC</b>	<b>revenue-to-variable cost</b>
<b>RTC</b>	<b>Rail Traffic Controller</b>
<b>SAC</b>	<b>stand-alone cost</b>
<b>SARR</b>	<b>stand-alone railroad</b>
<b>SEC</b>	<b>Securities and Exchange Commission</b>
<b>STB (or Board)</b>	<b>Surface Transportation Board</b>
<b>T&amp;E</b>	<b>train and engine crew</b>
<b>TSO</b>	<b>Third Supplemental Opening Evidence of WFA/Basin</b>
<b>UP</b>	<b>Union Pacific Railroad Company</b>
<b>URCS</b>	<b>Uniform Railroad Costing System</b>
<b>VC</b>	<b>variable cost</b>
<b>WFA</b>	<b>Western Fuels Association, Inc.</b>

## **CASE GLOSSARY**

The following short form case citations are used:

<b><u>1988 Revenue Adequacy Determination</u></b>	<b><u>Railroad Revenue Adequacy – 1988 Determination, 6 I.C.C.2d 933 (1990)</u></b>
<b><u>AEP Texas</u></b>	<b><u>AEP Tex. N. Co. v. BNSF Ry., STB Docket No. 41191 (Sub-No. 1) (STB served Sept. 10, 2007)</u></b>
<b><u>API.</u></b>	<b><u>Ark. Power &amp; Light Co. v. Burlington N. R.R., 3 I.C.C.2d 757 (1987)</u></b>
<b><u>APS 367</u></b>	<b><u>Ariz. Pub. Serv. Co. v. Atchison, Topeka and Santa Fe Ry., 2 S.T.B. (1997)</u></b>
<b><u>Arizona Grocery</u></b>	<b><u>Ariz. Grocery Co v. Atchison, Topeka, and Santa Fe Ry., 284 U.S. 370 (1932)</u></b>
<b><u>Coal Rate Guidelines or Guidelines</u></b>	<b><u>Coal Rate Guidelines, Nationwide, 1 I.C.C.2d 520 (1985), <u>aff'd sub nom. Consolidated Rail Corp. v. United States</u>, 812 F.2d 1444 (3<sup>rd</sup> Cir. 1987)</u></b>
<b><u>February '08 Decision</u></b>	<b><u>Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. BNSF Ry., STB Docket No. 42088 (STB served Feb. 29, 2008)</u></b>
<b><u>FMC</u></b>	<b><u>FMC Wyo. Corp. v. Union Pac. R.R., 4 S.T.B. 699 (2000)</u></b>
<b><u>KCPL</u></b>	<b><u>Kansas City Power &amp; Light Co. v. Union Pac. R.R. Co., STB Docket No. 42095 (STB served May 19, 2008)</u></b>
<b><u>Major Issues</u></b>	<b><u>Major Issues in Rail Rate Cases, STB Ex Parte No. 657 (Sub-No. 1) (STB served Oct. 30, 2006), <u>aff'd BNSF Ry. Co. v. STB</u>, 526 F.3d 770 (D.C. Cir. 2008)</u></b>
<b><u>March '05</u></b>	<b><u>Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. BNSF Ry., STB Docket No. 42088 (STB served March 14, 2005)</u></b>
<b><u>March '08 Decision</u></b>	<b><u>Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. BNSF Ry., STB Docket No. 42088 (STB served March 12, 2008)</u></b>

<u>McCarty Farms</u>	<u>McCarty Farms v. Burlington N., Inc.</u> , 2 I.C.C.2d 262 (1988)
<u>Otter Tail</u>	<u>Otter Tail Power Co. v. Burlington N. and Santa Fe Ry.</u> , STB Docket No. 42071 (STB served Jan. 27, 2006)
<u>OPPD</u>	<u>Omaha Pub. Power Dist. v. Burlington N. R.R.</u> , 3 I.C.C.2d 123 (1986)
<u>PEPCO I</u>	<u>Potomac Elec. Power Co. v. Penn C. Transp. Co.</u> , 356 I.C.C. 815 (1977).
<u>PEPCO II</u>	<u>Potomac Elec. Power Co. v. Penn C. Transp. Co.</u> , 359 I.C.C. 222 (1977)
<u>PPL</u>	<u>PPL Montana, LLC v. Burlington N. and Santa Fe Ry.</u> , 6 S.T.B. 752 (2003)
<u>Railroad Cost of Capital I</u>	<u>Methodology to be Employed in Determining the R.R. Indus. Cost of Capital</u> , STB Ex Parte No. 664 (STB served Aug. 14, 2007)
<u>Railroad Cost of Capital II</u>	<u>Methodology to be Employed in Determining the R.R. Indus. Cost of Capital</u> , STB Ex Parte No. 664 (STB served Jan. 17, 2008).
<u>Railroad Cost of Capital III</u>	<u>Use of a Multi-State Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital</u> , STB Ex Parte No. 664 (Sub-No. 1) (STB served Feb. 11, 2008)
<u>September '07 Decision</u>	<u>Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. BNSF Ry.</u> , STB Docket No. 42088 (STB served Sept. 10, 2007)
<u>Simplified Standards</u>	<u>Simplified Standards for Rail Rate Cases</u> , STB Ex Parte No. 646 (Sub-No. 1) (STB served Sept. 5, 2007), <u>pcts. for review pending sub nom. CSX Transp., Inc. v. STB</u> , No. 07-1369, <u>et al.</u> (D.C. Cir. filed Sept. 18, 2007)
<u>TPMA</u>	<u>Texas Mun. Power Agency v. Burlington N. and Santa Fe Ry.</u> , 6 S.T.B. 573 (2003)
<u>WTU</u>	<u>West Tex. Utils. Co. v. Burlington N. R.R.</u> , 1 S.T.B. 638 (1996)
<u>WPL</u>	<u>Wisconsin Power and Light Co. v. Union Pac. R.R.</u> , 5 S.T.B. 955 (2001)

Xcel

Pub. Serv. Co. of Colo. d/b/a Xcel Energy v. Burlington N. and  
Santa Fe Ry., STB Docket No. 42057 (STB served June 8, 2004)

**I Counsel's Argument and  
Summary of Evidence**

	)	
WESTERN FUELS ASSOCIATION, INC.	)	
and BASIN ELECTRIC POWER	)	
COOPERATIVE, INC.	)	
	)	
Complainants,	)	
	)	Docket No. 42088
v.	)	
	)	
BNSF RAILWAY COMPANY	)	
	)	
Defendant.	)	
	)	

## 1-1



## **I. COUNSEL'S ARGUMENT AND SUMMARY OF EVIDENCE**

### **A. PREFACE**

WFA/Basin filed their complaint in this case on October 19, 2004. The complaint alleged that BNSF's tariff rates on coal traffic moving from the Wyoming Powder River Basin ("PRB") to WFA/Basin's Laramie River Station ("LRS") were unreasonably high because these rates exceeded the maximums permitted under the Board's stand-alone cost ("SAC") constraint. The Board's SAC constraint requires a shipper to model a hypothetical stand-alone railroad ("SARR"). If SARR revenues exceed SARR costs, the complainant shipper is entitled to rate relief.

WFA/Basin modeled their SARR in the Winter of 2005. This railroad, called the "Laramie River Railroad" ("LRR"), was designed to maximize SARR revenues, and minimize SARR costs, under the Board's governing SAC standards in effect at that time, including the modified straight mileage prorate ("MSP") method to set divisions on cross-over traffic. Had the Board proceeded to decide the case under these standards, WFA/Basin would have obtained a very substantial rate reduction using the Board's percent reduction method since the LRR's revenues exceeded its costs by a wide margin.

The Board chose not to decide this case under the standards in effect when WFA/Basin filed their complaint and modeled the LRR. Long after the record initially closed in this case, the Board adopted several new SAC standards in Major Issues<sup>2</sup> and

---

<sup>2</sup> Major Issues in Rail Rate Cases, STB Ex Parte No. 657 (Sub-No. 1) (STB served Oct. 30, 2006) ("Major Issues"). aff'd BNSF Ry. Co. v. STB, 526 F.3d 770 (D.C. Cir.

retroactively applied them. WFA/Basin repeatedly objected to the Board's actions, inter alia, on grounds that WFA/Basin would have modeled a different SARR had the new Average Total Cost ("ATC") rule the Board adopted in Major Issues to set SARR cross-over traffic revenue divisions been in effect when it modeled the LRR.

In its decision served in this proceeding on September 10, 2007 ("September '07 Decision"), the Board found on the record presented to date that WFA/Basin had not demonstrated the challenged rates exceeded a reasonable maximum because the LRR's revenues did not exceed its costs. However, the Board recognized that deciding the case on the existing record was fundamentally unfair to WFA/Basin because WFA/Basin had not been given the opportunity to reconfigure the LRR in light of the new ATC rules. Id. at 20. The Board gave WFA/Basin the opportunity to supplement the record before the Board issued a final decision on their complaint. Specifically, the Board directed that WFA/Basin could reconfigure the LRR's traffic group, its physical configuration, and its operating plan and submit revised revenue, cost, and relief requests based upon this supplemental evidence. Id.

In their TSO evidence, WFA/Basin demonstrated that the revised LRR's stand-alone revenues exceeded its costs by approximately \$80 million annually.<sup>3</sup> WFA/Basin allocated this relief to members of the revised LRR's traffic group using the new Maximum Markup Methodology ("MMM") the Board adopted in Major Issues.

---

2008).

<sup>3</sup> See TSO e-workpaper "EXHIBIT\_III-H-1.xls." In the TS Rebuttal, this amount equals \$75 million annually. See TS Rebuttal e-workpaper "EXHIBIT III-H-1 Reb.xls."

Under MMM, revenue-to-variable cost (“R/VC”) ratios are calculated for each traffic group member’s traffic, by origin-to-destination pair. See Major Issues at 14-15. Using an iterative process, a benchmark ratio is calculated such that if all traffic with ratios above the benchmark R/VC ratio are reduced to the benchmark ratio, and rates on all traffic with ratios below the benchmark ratio remain unchanged, the SARR will earn sufficient revenues to meet its costs. Id. at 14-15. The purpose of MMM is to focus rate relief on the most demand inelastic shippers. Id.

WFA/Basin demonstrated that they were entitled to substantial rate relief because their R/VC ratios were substantially higher than all other members of the revised LRR’s traffic group and, when MMM was applied, their rates were reduced from levels that approximated 500% of variable costs to maximum benchmarks that approximated 200%. TS Rebuttal Table I-1 illustrates the application of the MMM procedures in a representative quarter (1Q05):

<b>TS Rebuttal Table I-1</b> <b><u>Application of MMM (1Q05)</u></b>	
<b><u>Utility</u></b> <b>(1)</b>	<b><u>R/VC Ratio<sup>1</sup></u></b> <b>(2)</b>
(1) WFA/Basin	531.5%
(2) {	{
(3) {	{
(4) {	{
(5) {	{
(6) {	{
(7) {	{
(8) {	{
(9) {	{
	Benchmark (204.6%)
(10) {	{
(11) {	{
(12) {	{
(13) {	{
(14) {	{
(15) {	{
(16) {	{
(17) {	{
(18) {	{
(19) {	{
(20) {	{
(21) {	{
(22) {	{
(23) {	{
(24) {	{
<sup>1</sup> Weighted Average for Quarter Source: MMM Model Linked to III-H-1 Reb.xls	

Most of BNSF's TS Reply evidence is devoted to attacking the revised LRR's traffic group and revenue calculations. BNSF maintains that the Board should dismiss this case because WFA/Basin chose a revised LRR traffic group, configuration, and operating plan for purposes of "gaming" the Board's MMM rate allocation methodology rather than complying with the instructions in the Board's September '07 Decision concerning the submission of supplemental evidence. Alternatively, BNSF contends that if the case is not dismissed, the Board should modify its "flawed" MMM

and ATC procedures by adopting a variety of “adjustments” to these procedures that reduce the revised LRR’s revenues and change the MMM’s R/VC ratio calculations. With BNSF’s proposed “adjustments,” the revised LRR’s revenues do not exceed its costs, and therefore WFA/Basin would be entitled to no relief.

WFA/Basin respond to BNSF’s contentions in this TS Rebuttal filing. As demonstrated in detail below, WFA/Basin did not “game” the Board’s maximum rate procedures, they applied them in the manner directed by the Board. As instructed by the Board, WFA/Basin reconfigured the LRR to maximize revenues and minimize expenses, and used ATC to set cross-over traffic divisions. WFA/Basin then allocated relief to members of the revised LRR’s traffic group using MMM. Following the rules is not gaming the rules. What BNSF really objects to is any application of the Board’s SAC rules that affords relief to captive coal consumers. As the Board knows, this has been BNSF’s modus operandi for years.<sup>4</sup> Accordingly, the Board cannot dismiss WFA/Basin’s complaint, as BNSF requests.

The Board also must reject BNSF’s request that the Board scrap its current ATC and MMM rules in favor of new “adjusted” versions of these rules proposed by BNSF. The Board wisely foresaw when promulgating ATC and MMM that some parties in individual cases might try to modify or change these procedures in order to produce a more favorable outcome in individual cases. The Board concluded in Major Issues that it

---

<sup>4</sup> Brief for Respondent STB at 36, BNSF Ry. v. STB, No. 05-1030, (D.C. Cir. filed July 21, 2005)(“Board’s Xcel Brief”) (BNSF “objects to any restraint on its pricing” and “any application of the SAC test that results in relief to captive shippers”).

would not consider collateral attacks on these rules in individual cases because the Board had adopted these rules to “settle” longstanding issues concerning the proper methodologies for setting cross-over traffic divisions and allocating SAC rate relief, and that “further debate” concerning these issues in individual cases “would defeat much of the purpose of this rulemaking.” Id. at 3, 76. Thus, in deciding this case the Board must apply its new rules, and not another set of new rules BNSF has concocted solely for purposes of insuring that WFA/Basin do not prevail in this case.

BNSF also claims that its tariff rates are “commercially reasonable” and therefore the Board should not afford WFA/Basin the relief they are entitled to under the Board’s SAC standard. TS Reply Narr. at I-2. Of course, BNSF monopolizes rail service from the PRB to the LRS plant. Its “commercial reasonableness” claim is really a euphemism for being a monopolist and extracting rates as high as WFA/Basin’s captive traffic can bear. WFA/Basin do not dispute BNSF’s monopoly power; they are victims of it and they look to the Board as their last line of defense to moderate BNSF’s monopoly pricing tactics.

The Board’s SAC standard is intended to be an effective constraint on rail carrier monopoly pricing. The constraint is based on contestable market principles and sets the maximums that a railroad can charge on captive traffic at the least cost that a simulated competitive carrier could charge for the service. BNSF is currently charging WFA/Basin rates that exceed BNSF’s service costs by over 500%. Over time these margins will increase to approximately 700%. Only a monopolist can extract rates at these levels. However, WFA/Basin’s evidence clearly demonstrates a simulated carrier,

providing efficient, least-cost competitive service, for WFA/Basin and other unit train coal shippers in their traffic group, clearly can and would provide this service at a reasonable mark-up over the hypothetical carrier's costs.

WFA/Basin are entitled to substantial rate relief because BNSF chose to impose rates in the 500%+ of cost range on the LRS traffic, whereas the revised LRR can provide this service to WFA/Basin at rates in the 200% of cost range. These maximum rates are also comparable to the maximum rates the Board has prescribed in its prior PRB maximum rate cases where it has found SARR revenues exceed SARR costs. See, e.g., Kansas City Power & Light Co. v. Union Pac. R.R. Co., STB Docket No. 42095 (STB served May 19, 2008) ("KCPL") (Board prescribes maximum rates on captive PRB coal traffic at 180% of the defendant carrier's variable costs); Wisc. Power and Light Co. v. Union Pac. R.R., 5 S.T.B. 955 (2001) ("WPL") (Board prescribes maximum rates on captive PRB coal traffic at 180% of defendant carrier's variable costs); Tex. Mun. Power Agency v. Burlington N. and Santa Fe Ry., 6 S.T.B. 573 (2003) ("TMPA") (Board prescribes maximum rates on captive PRB coal traffic at 193% of defendant carrier's variable costs); Pub. Serv. Co. of Colo. d/b/a Xcel Energy v. Burlington N. and Santa Fe Ry., STB Docket No. 42057 (STB served June 8, 2004) ("Xcel") on reconsideration id. (STB served Jan. 19, 2005) (prescribing maximum reasonable rates on captive PRB coal traffic at 252% of the defendant carrier's variable costs).

BNSF will also earn very substantial revenue contributions on the LRS traffic at the levels WFA/Basin ask the Board to prescribe. Over the 20-year discounted cash flow ("DCF") period, WFA/Basin are projected to pay BNSF \$500 million. Of this

**\$500 million, \$252 million is contribution in excess of variable costs. BNSF can use this revenue contribution to cover its system fixed costs, including new infrastructure costs. WFA/Basin's revenue contributions at the requested prescribed levels will continue to place the LRS movement in the very top tier of BNSF's customer base, as measured by revenue contribution.**

**WFA/Basin started this case nearly four years ago. It has been a long and costly road. The Board's SAC standard is complex and the Board's changes in its application of this standard, mid-case, created a whole new set of complications.**

**WFA/Basin are not-for-profit entities. As they stated at the outset of this case, and repeat again at the end of the case, they appear here on behalf of the rural consumers served by the LRS electric generating facility. The customers that receive LRS-generated power are predominately small ranchers, farmers, and households in the rural west, midwest, and southwest. Many of these customers are of modest means and, in Basin Electric's service territory, all too many live in poverty. In the end, it is these customers who pay BNSF's freight bills and have borne the brunt of BNSF's monopoly pricing. All relief the Board provides to WFA/Basin in this case will flow through to these consumers.**

**WFA/Basin respectfully request that the Board finally decide this case promptly and award WFA/Basin, and the consumers they represent here, the full relief they have demonstrated they are entitled to under the Board's SAC constraint. In the remainder of this filing, WFA/Basin present evidence and argument demonstrating:**



- WFA/Basin submitted a revised SARR that contains a traffic group, configuration, and operating plan that fully complies with the Board's directions for submitting supplemental SAC evidence;
- WFA/Basin have correctly calculated the revised LRR's traffic volumes and revenues in accordance with governing STB precedent;
- WFA/Basin's calculation of the revised LRR's operating costs and construction costs, as slightly modified in this rebuttal filing, are the best record evidence of these costs;
- The Board should use the Capital Asset Pricing Model ("CAPM") to calculate the revised LRR's capital costs in all time periods starting in 2002;
- WFA/Basin are entitled to rate relief because the revised LRR's revenues exceed its costs;
- WFA/Basin have properly allocated that rate relief using the Board's MMM procedures; and
- The Board should order BNSF to pay reparations for overcharges WFA/Basin have incurred since October 1, 2004 and prescribe maximum rates for the 20-year DCF time period.

**B. WFA/BASIN COMPLIED WITH THE BOARD'S DIRECTIVES IN MODELING THE REVISED LRR**

BNSF asks the Board to dismiss this case because, it alleges, WFA/Basin failed to follow the Board's instructions for submitting supplemental evidence and instead used the opportunity to submit supplemental evidence to "game" the Board's maximum

rate process. BNSF's contentions are absurd. See Part III-A-1 below. The Board's instructions were clear, WFA/Basin followed them, and BNSF's arguments to the contrary are baseless. Accordingly, the Board cannot dismiss WFA/Basin's complaint. See Part III-A-1-C-i below.

**1. The Board's Instructions Were Clear**

WFA/Basin modeled the original LRR to maximize revenues and minimize costs in the winter of 2005 using the MSP method to set cross-over traffic divisions. At the time WFA/Basin modeled the original LRR, the Board had used MSP, or similar mileage-based methods, to set SARR cross-over traffic divisions in every coal rate case decided by the Board in the last 10 years.<sup>5</sup> The Board decided in Major Issues to replace MSP with ATC. WFA/Basin argued repeatedly throughout this case that they would have modeled a different SARR had they known when they were modeling the original LRR that the Board was going to use ATC, not MSP, to set the LRR's divisions on cross-over traffic.

In its September '07 Decision, the Board acknowledged that "WFA argues strenuously, and persuasively, that had it known that the Board would change the revenue allocation methodology for cross-over traffic, it would have offered a different case." Id. at 3. The Board also acknowledged that "the change from MSP to ATC would affect the basic design of a SAC case." Id. at 20. The Board concluded that "fairness dictates that WFA have an opportunity to modify its SAC presentation in light of the new revenue

---

<sup>5</sup> See WFA/Basin Opening Narr. at III-A-17-18.

allocation methodology.” Id. The Board proceeded to offer WFA/Basin the opportunity to present a revised LRR. In modeling this revised SARR, the Board stated “WFA may increase or decrease the traffic group, change the configuration of the LRR, and submit evidence on all related issues,” but the parties could not “relitigate unrelated issues”:

WFA may increase or decrease the traffic group, change the configuration of the LRR, and submit evidence on all related issues (such as the revenue from new traffic or construction costs avoided or added due to a new configuration). However, neither party will be allowed to use this reopening of the record to relitigate unrelated issues (such as how to account for non-SARR traffic at the PRB mines).

Id. (footnote omitted).

The Board provided additional instructions in its decisions served on February 29, 2008 (“February '08 Decision”) and on March 12, 2008 (“March '08 Decision”). The Board ruled that WFA/Basin could develop the revised LRR using only information “in the administrative record, including the discovery record” (February '08 Decision at 8) as well as “publicly and commercially available data needed to develop a modified SAC presentation to address the ATC methodology” (March '08 Decision at 4).

## **2. WFA/Basin Followed the Board's Instructions**

WFA/Basin carefully followed the Board's instructions in modeling the revised LRR.

First, WFA/Basin changed the original LRR traffic group and its configuration to address ATC. The result is the revised LRR WFA/Basin submitted in

their TSO evidence. The revised LRR has a smaller traffic group than the original LRR, and a differently configured operating plan and physical plant.

Second, WFA/Basin submitted supporting evidence on all related issues.

This evidence included the submission of revised SARR traffic volume calculations; revised SARR revenue calculations; a revised SARR operating plan (including additional Rail Traffic Controller (“RTC”) modeling); revised SARR operating costs; a revised SARR construction plan; revised SARR construction costs; revised SARR DCF modeling; and allocations of SAC relief to the revised traffic group .

Third, WFA/Basin carefully avoided relitigating unrelated issues.

WFA/Basin developed SARR tonnages and revenues using procedures the Board had approved in Major Issues and this case; WFA/Basin utilized Board-approved procedures to develop its operating plan and in running the RTC model; WFA/Basin developed operating and construction costs using unit costs and unit costing procedures the Board had approved in its prior decisions in this case; WFA/Basin ran the DCF model in the manner the Board had used before in this case; and, since SAC revenues exceeded SAC costs, WFA/Basin allocated the SAC relief using the MMM procedures the Board adopted in Major Issues.

Fourth, WFA/Basin adhered to the Board’s directive to model the revised LRR using only data already in the administrative record or other publicly available data. All of WFA/Basin’s revised LRR revenue and cost calculations, along with their supporting evidence, utilize existing record data or publicly available data.

**3. BNSF's Assorted Contentions to the Contrary Are Wrong**

BNSF claims that WFA/Basin failed to comply with the Board's instructions because, it alleges, WFA/Basin impermissibly presented a "new SAC case;" WFA/Basin impermissibly grouped traffic including high-rated traffic in the revised LRR; WFA/Basin impermissibly "excluded" some low-rated traffic in the revised LRR; and WFA/Basin impermissibly grouped traffic by including rerouted traffic.<sup>6</sup> These contentions are wrong. WFA/Basin did not present a new SAC case and reconfigured the LRR using longstanding Board-approved grouping principles and procedures.

**a. WFA/Basin Did Not Present A New SAC Case**

BNSF repeats over and over again that WFA/Basin did not comply with the Board's instructions because they impermissibly presented a "new SAC case." See e.g., TS Reply Narr. at I-3, III.A-2-3. The language that BNSF is referring to appears in the Board's February '08 Decision discussion concerning the use of non-record evidence.

The Board's decision states in pertinent part:

The supplemental evidence should be limited to what is already in the administrative record, including the discovery record, except information the parties need to develop cost-of-capital calculations under CAPM. This is not an opportunity to submit a new case, but instead is an opportunity to allow WFA to modify its SAC presentation in light of the new revenue allocation methodology applied in the September '07 Decision.

Id. at 8.

---

<sup>6</sup> See TS Reply Narr. at III.A-1-14.

As the Board's discussion makes clear, the Board's admonition that the parties "not . . . submit a new case" was directed at the use of non-record information. In a "new case" parties develop a new record, and the Board made clear that in submitting supplemental evidence the parties could not develop a new record but instead were limited to use of data in the existing record. The Board subsequently clarified this statement to permit the parties to use non-record public information. March '08 Decision at 3-4

WFA/Basin did not violate the Board's directive that they not submit a new SAC case because they adhered to the Board's evidentiary directive. The Board also made it clear in its September '07 Decision that "the change from MSP to ATC would affect the basic design of a SAC case." Id. at 20. And, as the Board knows, changing the design of a SARR requires substantial supporting evidence and modeling. WFA/Basin did change the "basic design" of their SAC case but that is what they were directed to do. They did not, however, submit a "new case" because their revised design was based on existing record data and related public information. Simply stated, WFA/Basin did not go back to square one and file a new case with a new record.

**b. WFA/Basin Did Not Group Traffic Impermissibly**

BNSF also repeatedly claims that WFA/Basin impermissibly "excluded" some traffic from the revised LRR, and impermissibly "included" other traffic, in an effort to "game" the Board's new MMM methodology. See TS Reply Narr. at I-6, I-15-19. BNSF's arguments find no support in the Board's decisions in this case and

constitute a basic assault on bedrock grouping principles set forth in the Coal Rate Guidelines<sup>7</sup> and reaffirmed in Major Issues.

The Board afforded WFA/Basin the opportunity to submit a revised SARR that increased or decreased the traffic group and changed the configuration of the LRR. The Board left it to WFA/Basin to make these changes. The Board's actions conform to core SAC principles. These principles hold that the complainant shipper can select its traffic group, its operating plan, and its physical configuration.<sup>8</sup> The complainant gets to make the choice because it, not the defendant carrier, has the incentive to model a SARR that maximizes revenues, minimizes costs, and produces the best result for the complainant shipper.<sup>9</sup>

---

<sup>7</sup> Coal Rate Guidelines, Nationwide, 1 I.C.C.2d. 520 (1985) ("Coal Rate Guidelines" or "Guidelines"), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3rd Cir. 1987).

<sup>8</sup> See Guidelines, 1 I.C.C.2d at 543-44 (Complainant shippers "have broad flexibility to develop the least costly, most efficient plant. . . . We see no need for any restrictions on the traffic that may potentially be included in a stand-alone group."); see Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. BNSF Ry., STB Docket No. 42088 (STB served March 14, 2005) at 2 ("[i]t is a long-standing principle in SAC cases that the shipper has the right to select its SARR traffic group") ("March '05 Decision"); Major Issues at 8 ("To make a SAC presentation, the complainant designs a SARR specifically tailored to serve an identified traffic group, using the optimum physical plant or rail system needed for that traffic. . . . Based on the traffic group to be served, the level of services to be provided, and the terrain to be traversed, a detailed operating plan must be developed.")

<sup>9</sup> See, e.g., McCarty Farms v. Burlington N., Inc., 2 I.C.C.2d 262, 271 (1988) (defendant carrier "has little incentive to develop a least cost [SARR] system") ("McCarty Farms").

As the Board knows, modeling a SARR that maximizes revenues and minimizes costs is “of paramount importance to the SAC test”:

The development of the traffic base for the SARR is of paramount importance to the SAC test. The size of the shipper base determines the optimal size of the plant and its attendant cost. The shipper group also defines the revenues that could be earned by the SARR. Thus, the proponent of a hypothesized stand-alone system must balance the cost of providing transportation for its proposed group with the revenues that can be earned from the service it provides.

Bituminous Coal – Hiawatha, UT to Moapa, NV, 6 I.C.C. 2d 1, 43 (1989). This exercise requires extensive computer modeling to determine the best revenue/cost result, which result also must meet other SAC criteria (e.g., the RTC model running to completion, no internal cross-subsidies and, under the Board’s new MMM procedures, relief allocation to the complainant shipper).<sup>10</sup>

WFA/Basin engaged in this exercise when they modeled the original LRR using MSP divisions on cross-over traffic. The change from MSP to ATC substantially reduced the LRR’s revenues so that the LRR’s revenues did not exceed its costs.

Following the Board’s issuance of its September '07 Decision, WFA/Basin engaged in a

---

<sup>10</sup> See, e.g., WPL, 5 S.T.B. at 965 n.20 2001 (“Using computer models to simulate the flow of traffic over the defendant rail’s system, the complainant can select a traffic group and route system for the SARR that would have sufficient economies of density to maximize revenues while minimizing costs”); FMC Wyo. Corp. v. Union Pac. R.R., 4 S.T.B. 699, 721 n. 51 (2000) (“FMC”) (same).



similar modeling process, this time substituting ATC revenues for MSP revenues in their modeling. The revised LRR is the result of this new modeling.

**c. WFA/Basin Did Not Impermissibly Exclude Traffic**

BNSF argues that in modeling the revised LRR, WFA/Basin impermissibly “excluded” 19 million tons of annual traffic that BNSF currently transports from the PRB to Northport. TS Reply Narr. at III.A-13, III.A-27. This is all very low-rated traffic, with an average R/VC ratio of 0.88. See Part III-A-1-b below. WFA/Basin did not impermissibly “exclude” this traffic in the revised LRR because it was not required to include this traffic in the revised LRR. The Board’s instructions clearly permit WFA/Basin to “increase or decrease” the traffic carried by the revised LRR and WFA/Basin chose not to include this traffic in the revised LRR.

BNSF also appears to argue that a SARR is required to include in its traffic group all traffic carried by the incumbent moving over a SARR’s route of movement. This proposed grouping standard does not apply in large rate cases. The Board’s large case SAC standards permit a shipper to choose the traffic group, which can include a “subset” of the incumbent carrier’s traffic.<sup>11</sup> The SARR is also not responsible for carrying traffic it does not include in its traffic group:

---

<sup>11</sup> See West Tex. Utils. Co. v. Burlington N. R.R., 1 S.T.B. 638, 712 (1996) (“WTU”)(“the complaining shipper can select any subset of available traffic to determine the least cost at which that subset could be served independently of other traffic”); Ariz. Pub. Serv. Co. v. Atchison, Topeka and Santa Fe Ry., 2 S.T.B. 367, 381 (1997) (same) (“APS”).

[H]ow non-issue traffic not included in the [stand-alone traffic] group would move generally is irrelevant to the hypothetical stand-alone exercise. The goal of a stand-alone model is to develop the least-cost, hypothetically efficient but nonetheless feasible manner of fulfilling the proponent's transportation needs. Stand-alone cost is not a rail planning exercise that must ensure that all other (non-issue) traffic would have rail service. Rather, it is merely a test to determine whether a shipper can hypothesize a scenario that would reduce its own transportation costs.

McCarty Farms v. Burlington N. Inc., STB Docket No. 37809 (STB served Feb. 13, 1995), 1995 WL 55449 at \*7.

These basic grouping rules are predicated upon the contestable market principles set forth in the Coal Rate Guidelines. See id., 1 I.C.C. 2d at 528-29. In a contestable market, a simulated competitor can pick and choose which traffic it will transport and, as the competitor, is directed to target the monopoly carrier's highest rated traffic.<sup>12</sup> The theory holds that, with this potential competitive threat in place, a monopolist will not price like a monopolist but instead will price traffic in a competitive fashion to prevent the traffic from being diverted to the potential competitor.

BNSF also does not apply its own "carry all the traffic" rule. In modeling the revised LRR, WFA/Basin did not include approximately 48 million tons of real-world

---

<sup>12</sup> See William L. Baumol, John C. Panzar & Robert D. Willig, Contestable Markets and the Theory of Industry Structure at 481 (Rev. ed. 1986) ("entry opportunities will naturally be most attractive in those lines of activity whose incremental revenues are highest relative to incremental costs. It is entirely legitimate and desirable for entrants to seek [these opportunities] out . . ."); Guidelines, 1 I.C.C.2d at 543 (a SARR should "maximize the carriage of profitable traffic").

BNSF traffic that originates in the PRB and is routed via Guernsey, WY to Northport, NE. BNSF claims that 19 million of these tons were impermissibly excluded, but does not explain why it chose these 19 million tons and, if the 19 million tons were impermissibly excluded, why the other 29 million tons WFA/Basin chose not to include in the revised LRR were also not impermissibly excluded. The only reasons WFA/Basin can fathom for BNSF's choice of the class of "excluded" traffic is that the traffic has low R/VC ratios and BNSF wants to create the impression, as discussed below, that WFA/Basin excluded this traffic to make-way for traffic that WFA/Basin added to the revised LRR's route of movement.

**d. WFA/Basin Did Not Impermissibly Add Traffic**

BNSF also argues that WFA/Basin impermissibly added approximately 19 million tons of rerouted traffic in the revised LRR. According to BNSF, adding this traffic is impermissible because WFA/Basin did not demonstrate that inclusion of this traffic is permissible because the Board's instructions to the parties do not permit the adding of traffic; because WFA/Basin did not present evidence demonstrating inclusion of the rerouted traffic is permissible under the standards set forth in prior Board decisions; and because WFA/Basin's use of rerouted traffic impermissibly "games" the Board's new MMM procedures for allocating SAC relief. See Part I-B and III-A below.

**i. The Board's Instructions Permit WFA/Basin to Add Traffic**

BNSF argues that WFA/Basin are precluded from adding traffic over the revised LRR's route of movement because the Board's September '07 Decision permits

WFA/Basin only to “drop some unprofitable traffic.” TS Reply Narr. at III.A-5. Of course, that is not what the Board’s September '07 Decision says. That Decision permits WFA/Basin to “increase or decrease the traffic group,” to “change the configuration of the LRR,” and “submit evidence on all related issues (such as the revenue from new traffic).” Id. at 20.

BNSF also argues that the Board’s instructions preclude WFA/Basin from including in the revised LRR’s traffic group traffic that WFA/Basin had the “incentive” to include in the original LRR, but chose not to do so. BNSF goes on to contend that WFA/Basin had the “incentive” to include rerouted traffic in the original LRR, and since they did not do so, WFA/Basin are precluded from doing so now in the revised LRR. TS Reply Narr. at III.A-5. Once again, BNSF has misread the Board’s instructions.

The Board clearly understood in its September '07 Decision that its change from MSP to ATC “would affect the basic design of a SAC case” and therefore afforded WFA/Basin the opportunity to reconfigure the LRR to address the new revenue methodology. Id. at 20. Moreover, BNSF’s “incentives” arguments recycle contentions the Board rejected in denying BNSF’s petition for reconsideration in the September '07 Decision.

In its reconsideration petition, BNSF asked the Board to overturn its order permitting WFA/Basin the opportunity to present supplemental SAC evidence. BNSF cited the Board’s PPL decision<sup>13</sup> in support of this request. BNSF’s Petition for

---

<sup>13</sup> PPL Montana, LLC v. Burlington N. and Santa Fe Ry., 6 S.T.B. 752 (2003) (“PPL”).

Reconsideration (filed Oct. 22, 2007) at 7. In PPL, the Board denied the complainant shipper's request for relief on grounds that its SARR had an internal cross-subsidy. Thereafter, the complainant shipper asked the Board for permission to reconfigure its SARR to increase MSP revenues on the cross-subsidy segment. The Board rejected this request on grounds that the complainant shipper had the "incentive" to maximize MSP revenues at the outset of the case: the Board's finding of an internal cross-subsidy had not changed this "incentive;" and therefore the Board would not permit the complainant shipper to reconfigure its SARR. PPL, 6 S.T.B. at 760.

In its February '08 Decision, the Board considered and rejected BNSF's "incentives" argument. The Board held that "[u]sing ATC rather than MSP changes the incentives for a shipper in the selection of the traffic group to be used." Id. at 3 (footnote omitted). The Board also distinguished its ruling in PPL, a case "where the Board concluded that adoption of the internal cross-subsidy test did not alter the incentives of the complainant there." Id. at 3 n. 3. WFA/Basin factored in these revised incentives when creating their revised LRR.

BNSF also attempts to spin its incentives argument into the Alice-in-Wonderland "what if" world. BNSF claims that WFA/Basin had the "incentive" to include rerouted traffic in the original LRR and therefore the change to ATC does not affect that "incentive." TS Reply Narr. at III.A-5. Of course, the issue now is not whether WFA/Basin could have modeled an MSP SARR that could have resulted in greater relief (had the Board retained MSP), but how WFA/Basin have reconfigured the original LRR to maximize relief under ATC. See Part III-A-1-c below.

Moreover, WFA/Basin configured the original LRR as a railroad having its eastern terminus at Guernsey, WY. Any rerouting of traffic under that configuration would have resulted in an external reroute (i.e., the traffic not returning to the residual BNSF along its current route of movement) which would have led to substantial complications given the Board's external reroute standards. See Part III-A-1-c below. WFA/Basin also did not do any modeling at the time to extend the original LRR beyond Guernsey to Northport (which eliminates the internal reroute) and the only record evidence addressing this issue was supplied by BNSF in its original Reply evidence filed July 20, 2005. See BNSF Reply Narr. at III.A-14. There, BNSF maintained that extending the original LRR beyond Guernsey would reduce or eliminate the substantial relief WFA/Basin would have otherwise obtained under the MSP and percent reduction methodologies. See TS Reply Narr. at III.A-14.

**ii. WFA/Basin Met the Board's Standards  
For Inclusion of Rerouted Traffic**

The Board has consistently ruled that a complainant shipper in a SAC case can include rerouted traffic in its traffic group, and operating plan, provided the reroute complies with the Board's traffic reroute standards.<sup>14</sup> The Board's reroute standards also divide rerouted traffic into two categories: internal reroutes and external reroutes.<sup>15</sup> Internal reroutes refer to reroutes where the SARR moves the traffic over a different route

---

<sup>14</sup> See, e.g., TMPA, 6 S.T.B. at 594-95, 598; AEP Tex. N. Co. v. BNSF Ry., S.T.B. Docket No. 41191 (Sub-No. 1)(STB served Sept. 10, 2007) at 9-11 ("AEP Texas"); Xcel at 20-21.

<sup>15</sup> AEP Texas at 9-11.

than the real-world route but interchanges the traffic along the real-world route of movement (or at the real-world destination).<sup>16</sup> External reroutes refer to reroutes where the SARR moves the traffic over a different route of movement than the real-world route and interchanges the traffic at a point not along the real-world route of movement.<sup>17</sup>

WFA/Basin's revised SARR reroutes approximately 19 million tons of PRB coal traffic. In the real-world, this traffic leaves the PRB from the north at Donkey Creek, WY where it proceeds to Northport, NE via Edgemont, SD and Alliance, NE. WFA/Basin reroutes this traffic south, so that it exists the PRB via Guernsey, WY to Northport. All of this traffic is internally rerouted traffic because the traffic is interchanged along its real-world route of movement at Northport. This type of rerouting is not unusual in PRB SAC cases. In three prior PRB cases, the complainant shipper has presented a SARR with internally rerouted traffic to Northport. The Board has approved these internal reroutes in each case. WFA/Basin are familiar with the standards the Board has applied in approving internal reroutes and carefully adhered to them in modeling the revised LRR.

The Board has applied the same legal standards in each of the three prior cases involving internally rerouted PRB traffic. The Board permits the use of this traffic where the on-SARR routing "is reasonable and would meet the shippers' needs."<sup>18</sup>

---

<sup>16</sup> Id. at 10-11.

<sup>17</sup> Id. at 11 n.18.

<sup>18</sup> Id. at 10; accord TMPA, 6 S.T.B. at 594-96; Xcel at 20-21.

WFA/Basin demonstrated that the on-SARR routing “meet the shippers’ needs” because the LRR can move the rerouted traffic, even in the peak week, at substantially faster transit times between the PRB and Northport than BNSF does using the real-world PRB to Northport routing. See Part III-C-3 below. WFA/Basin also demonstrated that the reroutes are “reasonable” because they are an integral part of the revised LRR’s configuration and operating plan to maximize revenues using ATC divisions and to minimize costs.

The proof that WFA/Basin submitted under the Board’s internal reroute standards is identical in form to the proof the parties have submitted in the three prior PRB reroute cases and identical to the proof the Board accepted in approving the use of these internal reroutes in each of the three prior cases. See Part III-A-1-c below.

BNSF claims that WFA/Basin have not complied with the rerouting standards set forth in the Board’s TMPA decision. See TS Reply Narr. at I-13-15. That is simply wrong. In TMPA, the Board approved the rerouting of PRB traffic to Northport because it found the rerouting was reasonable and met the rerouted shipper’s needs. WFA/Basin also reroute PRB traffic to Northport and in this case, WFA/Basin have demonstrated that this rerouting is reasonable and meets the rerouted shipper’s needs using proof that is identical to that the Board relied upon in TMPA. See Parts III-A-1 and III-C-3 below.

BNSF also argues that WFA/Basin’s use of rerouted traffic in this case does not “further legitimate SAC objectives” because “WFA/Basin say not one word about how the changes to [their] traffic group or the SARR’s configuration would address



alleged inefficiencies in BNSF's network or operations." TS Reply Narr. at III.A-8. This is not the standard used by the Board for evaluating rerouted traffic.<sup>19</sup> The Board's SAC test calls for the modeling of an efficient alternative carrier to the incumbent.

WFA/Basin's entire case is devoted to modeling an alternative carrier, the revised LRR, that provides service to its traffic group that is superior to the service provided by BNSF and at prices that are collectively lower for the traffic group than BNSF now charges for providing the service.

**iii. The Board's Simplified SAC  
Standards Are Not Applicable**

BNSF repeatedly cites the Board's Simplified Standards<sup>20</sup> decision in support of its claim that WFA/Basin impermissibly included rerouted traffic in the revised LRR. See, e.g. BNSF TS Reply at I-14-15, III.A-8-9. In Simplified Standards, the Board adopted a "Simplified SAC" methodology. Id. at 15-16. This methodology applies, at the complainant shipper's option, in medium-sized rate cases. To keep the costs of Simplified SAC cases down, the Board adopted a number of limitations on the traffic grouping options that are available in large rate cases. See id. at 15 ("[t]he Simplified-SAC presentation will differ from a Full-SAC presentation by eliminating or restricting the evidence parties can submit on certain issues").

---

<sup>19</sup> See Part III-A-1-c below.

<sup>20</sup> Simplified Standards for Rail Rate Cases, STB Ex Parte No. 646 (Sub-No.1) (STB served Sept. 5, 2007) ("Simplified Standards") pets. for review pending sub nom. CSX Transp., Inc. v. STB, No. 07-1369, et al. (D.C. Cir. filed Sept. 18, 2007).

The traffic grouping limitations set forth in Simplified Standards do not apply in this case because it is a large rate case, not a medium-sized case. The Board also made very clear in Simplified Standards that the limitations placed on traffic grouping under its Simplified SAC standards do not govern in large rate cases where the Board performs a “Full-SAC analysis”:

Interested Parties cite to the ICC’s statement in Guidelines that “[t]he ability to group traffic of different shippers is essential to the theory of contestability.” Guidelines, 1 I.C.C.2d at 544. This approach will not remove their ability to group traffic; rather, it reflects grouping of traffic to the same degree enjoyed by the defendant carrier. . . . Were we to permit a complainant to base its case on the greater densities that could be achieved by routing more traffic onto those lines, or the reduced densities that would be obtained by selecting only a subset of the actual traffic, the complexity of the analysis would spiral back to that of the Full-SAC analysis. We would then need a new configuration and operating plan, and could not rely on URCS to simplify the process. Such a detailed analysis needed for rerouting of traffic or reconfiguration of the system can only take place in the Full-SAC analysis.

Id. at 57.

The Board’s decision in AEP Texas confirms that Simplified Standards does not change the Board’s large case grouping principles. AEP Texas was decided after the Simplified Standards decision was served. In AEP Texas, the Board applied its large case grouping principles and, as discussed above, approved AEP Texas’ rerouting

of PRB traffic because it found the rerouting to be “reasonable and would meet the shippers’ needs.” Id. at 10.

**e. WFA/Basin Are Following the Rules, Not Gaming Them**

BNSF argues that WFA/Basin are “gaming” the Board’s SAC rules, and its MMM test, by “excluding” low-rated traffic the original LRR carried and by including “high rated” rerouted traffic. TS Reply Narr. at III.A-9-14. However, WFA/Basin are clearly not “gaming” the Board’s SAC rules they are following them. See Part III-A-1-c below. The Board’s SAC standards instruct a shipper to design a feasible SARR that maximizes revenues and minimizes expenses. Coal Rate Guidelines, 1 I.C.C. 2d at 542-43. Indeed, the Board has chastised shippers if they fail to do so.<sup>21</sup> WFA/Basin are not gaming the rules, they are following them.

What BNSF really appears to be advocating is a standard where the defendant carrier gets to pick the traffic group and traffic routing. The Board has consistently rejected carrier efforts to do so, and with good reason – the carrier has no incentive whatsoever to present a SARR which maximizes relief for the complainant shipper.<sup>22</sup> The Board need to look no further than BNSF’s evidence in this case as a

---

<sup>21</sup> See PPL, 6 S.T.B. at 760 (STB rejects complainant shipper’s request to submit additional evidence on grounds that complainant already had “every incentive from the outset of the case” to maximize revenues and minimize costs).

<sup>22</sup> See, e.g., Xcel at 22 (STB declines to adopt defendant railroad’s proposed operating plan changes which would amount to providing “the defending railroad . . . de facto control over the traffic group . . . – a result contrary to the Guidelines, which vest that decision initially with the shipper and ultimately with the Board”); McCarty Farms, 2 I.C.C.2d at 271 (defendant carrier “has little incentive to develop a least cost [SARR] system”).

demonstration of this point. BNSF has posited two alternative SARRs, which it calls SARR I and SARR II, that model BNSF-selected traffic groups and traffic routings. Of course, these SARRs provide little or no relief to WFA/Basin. See Part III-A-1-b below.

BNSF also claims that WFA/Basin are engaged in the very same type of “gaming” the Board was concerned about in Major Issues. The principal gaming concern the Board addressed in Major Issues was carrier gaming of the percent reduction method by setting very high tariff rates. See Major Issues at 10-11. The Board also expressed concern that a shipper with low-rated traffic could game the percent reduction method by grouping its traffic with high-rated traffic and, if SARR revenues exceeded SARR costs, obtain an equal percentage reduction. Id. at 22-23.

To prevent gaming, the Board replaced percent reduction with MMM. Under MMM, traffic group members rates are arrayed on a R/VC ratio basis. See Major Issues at 14-15. MMM then utilizes an iterative process that first determines the average R/VC ratio for the SARR traffic group movements and adjusts that average upward (if necessary) to the benchmark R/VC ratio where if all traffic with R/VC ratios above the average are reduced to the benchmark average level, and all other rates are left unchanged, the SARR will cover its SAC costs. Id. Under MMM, carrier gaming is eliminated because high R/VC ratio traffic obtains reductions to the benchmark and shipper gaming is eliminated because low R/VC ratio traffic that is under the benchmark obtains no relief. Id. at 15-16, 20.

WFA/Basin are clearly not engaged in any form of shipper gaming. The evidence in this case, which BNSF does not contest, shows that WFA/Basin’s traffic

bears the highest R/VC ratios (by far) of any other traffic in the SARR group. See TS Rebuttal Table 1-1. Nor, of course, are WFA/Basin engaged in gaming by including other traffic that is high rated. That is what they are supposed to do.

**f. Due Process Precludes Arbitrary Grouping Limitations**

The STB changed the governing SAC rules during the pendency of WFA/Basin's case. Basic principles of administrative due process require that the Board accord WFA/Basin the right to submit conforming proof free of any arbitrary restrictions on the submission of that proof. See Hatch v. FERC, 654 F.2d 825, 835 (D.C. Cir. 1981) (when an agency changes a "controlling standard of law" and "appl[ies] it retroactively in an adjudicatory setting," parties "must have a meaningful opportunity to submit conforming proof") (emphasis added).<sup>23</sup>

BNSF asks the Board to deny WFA/Basin a "meaningful opportunity to submit conforming proof" through the imposition of numerous arbitrary restrictions on WFA/Basin's right to present a revised LRR that maximizes revenues using ATC and minimizes costs. The Board must not do so. BNSF's requests are particularly outrageous since, less than a year ago in this docket, BNSF conceded that the Coal Rate Guidelines

---

<sup>23</sup> Accord Ford Motor Co. v. ICC, 714 F.2d 1157, 1165 (D.C. Cir. 1983) ("agency must accord parties notice and meaningful opportunity to meet new standard"); Aero Mayflower Transit Co. v. ICC, 699 F.2d 938 (7th Cir. 1983) (same); Puerto Rico Aqueduct and Sewer Auth. v. EPA, 35 F.3d 600, 607 (D.C. Cir. 1994) ("when an adjudicating agency retroactively applies a new legal standard that significantly alters the rules of the game, the agency is obligated to give litigants proper notice and a meaningful opportunity to adjust").

provide WFA/Basin the right to select a traffic group that maximizes revenues and minimizes costs:

the Guidelines permit the complainant to select the SARR's traffic group so that the complainant has the opportunity to maximize revenue contribution to the SARR. If a complainant believes that a particular low rated movement may not contribute to the SARR's costs, it can exclude that traffic from the SARR traffic group.

BNSF's Petition for Reconsideration (filed Oct. 22, 2007) at 18.

**g. The Board Should Deny BNSF's Dismissal Request**

BNSF asks the Board to dismiss WFA/Basin's case on grounds that WFA/Basin have impermissibly reconfigured the revised LRR. The Board should deny BNSF's request for the reasons set forth above. WFA/Basin revised the LRR in a manner that complies with the Board's instructions in this case and otherwise complies with the standards set forth in Coal Rate Guidelines, Major Issues and governing Board precedent.

**C. WFA/BASIN CORRECTLY CALCULATED THE REVISED LRR'S TRAFFIC VOLUMES AND REVENUES**

WFA/Basin correctly calculated the revised LRR's traffic volumes and traffic revenues. See Part III-A-3 below. BNSF's assorted contentions to the contrary are wrong.

**1. BNSF Accepts WFA/Basin's Traffic Volume Calculations**

WFA/Basin's ISO evidence calculated that the revised LRR will transport approximately 63.1 million tons in 2005 and 1.3 billion tons over the 20-year DCF period. WFA/Basin developed these traffic volumes using material in the existing administrative

record. On reply, BNSF accepts these calculations as correct for the traffic group WFA/Basin have selected.

**2. WFA/Basin Developed Traffic Revenues In Accordance With the Board's Instructions and Governing Board Precedent, But BNSF Did Not**

WFA/Basin's traffic group consists of three types of traffic: the issue traffic, cross-over traffic, and one interline movement. WFA/Basin calculated the revenues for the issue movement using the revenue calculations set forth in the administrative record. WFA/Basin set their cross-over divisions using the Board's ATC method adopted in Major Issues and applied in this case and in AEP Texas. WFA/Basin set the revenues for their one interline movement at BNSF's real-world division, which is the procedure the Board has consistently used in prior cases involving interline traffic. See, e.g., Xcel at 19-23. WFA/Basin calculated revenues using these procedures under two different capital cost assumptions – CAPM and single-stage DCF. The resulting revenues were \$236.8 million in 2005 and \$6.2 billion over the 20 year DCF period (both with CAPM).

BNSF accepts WFA/Basin's calculation of the revised LRR's revenues on the issue traffic. TS Reply at III.A-14. However, BNSF disputes WFA/Basin's calculations of cross-over traffic revenues and interline traffic revenues. Id. at III-A-16-29. BNSF asserts that WFA/Basin's revenues are overstated by approximately \$175 million in 2005 and \$1.5 billion over the 20-year DCF period. See TS Reply at III.A-29.

Aside from its objection to WFA/Basin's use of CAPM,<sup>24</sup> BNSF does not argue that WFA/Basin's revenue calculations are wrong under the Board's current procedures. Instead, it asks the Board to make wholesale changes in these procedures. Specifically, BNSF asks the Board to change the ATC procedures by incorporating a "rerouted traffic adjustment;" by utilizing the incumbent carrier's on-SARR densities; and by applying ATC to traffic revenues, not traffic contribution. BNSF also asks that the Board apply the rerouted traffic adjustment to the revised LRR's interline movement. As shown in WFA/Basin TS Rebuttal Table I-2, the effect of these changes is to reduce the revised LRR's 2005 revenues by over 25% (from \$236.8 million to \$175.3 million):

<b>TS Rebuttal Table I-2</b> <b>Impact of BNSF's Proposed Changes in Current Revenue</b> <b>Calculation Standards (2005)</b>	
Item	Amount (Million \$)
1 WFA/Basin Revenue	\$236.8
2 BNSF Reroute Adjustment	(45.9)
3 BNSF Contribution Adjustment	(11.8)
4 BNSF Density Adjustment	(3.9)
5 BNSF URCS Adjustment	(0.8)
6 Adjusted Revenue	\$175.3

---

<sup>24</sup> WFA/Basin presented DCF models that calculate ATC revenues with CAPM and with the Board's single-stage DCF procedures. Applying CAPM increases the revised LRR's revenues by 0.3% over the 20 year DCF period. WFA/Basin address CAPM issues in Part I-E and III-G below.



**3. The Board Should Reject BNSF's  
Rerouted Traffic Revenue Adjustment**

BNSF proposes to “adjust” the revenues WFA/Basin calculated on their rerouted traffic movements by reducing the revenues on each movement so that they equal 88% of variable costs. See TS Reply Narr. at III.A-13-14. BNSF’s proffered rationale is that the 18 million tons of rerouted traffic, which have average R/VC ratios of { }, impermissibly displaced 19 million tons of traffic that WFA/Basin included in their original traffic group that had average R/VC ratios of 88%. Id. BNSF also claims that this adjustment is an appropriate penalty for WFA/Basin’s “gaming” of the Board’s MMM procedures. Id. The Board must summarily reject BNSF’s rerouted traffic adjustment for three reasons.

First, BNSF’s proposed adjustment is an impermissible collateral attack on the Board’s ATC and MMM procedures. The Board adopted ATC and MMM to settle longstanding disputes in cases on how to set divisions on cross-over traffic and how to allocate relief within the SAC traffic group. The Board also recognized that in individual cases that followed, parties might ask the Board to make “adjustments” to the ATC and MMM procedures that favored one side or the other. The Board ruled that it would not consider these party-sponsored adjustments in individual cases because that would defeat the purpose of the rulemaking – to “settle” these matters and provide “direction” to parties in future cases. Major Issues at 3. Instead, the Board held that if a party wanted to seek changes in the Board’s procedures, it would be required to file a rulemaking petition

and demonstrate that the procedures were “systematically biasing one party or another.”  
Id. at 77.

Second, BNSF’s adjustment is predicated on a set of false assumptions. As discussed above, WFA/Basin did not impermissibly exclude any traffic from the revised LRR, nor did they impermissibly include rerouted traffic. Instead, WFA/Basin followed the rules and modeled a revised SARR that maximizes revenues using ATC and minimizes costs. BNSF simply does not like the answer, and is trying to manipulate the results by devising a complex new method that takes revenues calculated using Board-approved procedures and unilaterally reduces them by arbitrary formulas. WFA/Basin have already had the rules changed on them once; the Board cannot, and should not, do so again.

Third, if the Board permits BNSF to make wholesale changes in the Board’s ATC and MMM procedures, the Board will be opening a Pandora’s box of complications it sought to resolve in Major Issues. Shipper complainants will once again not know how to properly model SARR’s because major component parts can be changed in individual cases. Railroads will be emboldened to press forward with a variety of other self-styled “adjustments” that in fact radically transform the involved standards so that the only common thread they have with the Board’s original MMM and ATC methods is the name.

#### **4. The Board Should Reject BNSF’s Contribution Adjustment**

The Board, on its own motion, clarified one technical aspect of its ATC methodology in its September '07 Decision. Specifically, the Board ruled that ATC total

cost ratios should be applied to the cross-over traffic movement's revenue contribution (if any) not to the movement's total revenue. BNSF objected to this clarification and its objections were overruled by the Board in the February '08 Decision.

In their opening evidence, WFA/Basin applied the Board's ATC procedures to movement contribution. BNSF again objects to this approach, raising the same arguments it raised, and the Board rejected, in the February '08 Decision. The Board specifically instructed parties not to "relitigate" settled issues in their supplemental evidence, but BNSF is doing so anyway with its contribution contentions. The Board must summarily reject these contentions as violating its no relitigation directive. BNSF's proposed adjustment is also totally flawed. See Part III-A-3 below.

**5. The Board Should Reject BNSF's Density Adjustment**

The Board's ATC procedure calls for the calculation of on-SARR traffic densities and off-SARR traffic densities. The Board stated in Major Issues that on-SARR traffic densities should be calculated using the SARR's traffic densities and the off-SARR traffic densities should be calculated using the residual incumbent's densities. The Board proceeded to direct the parties in this case, and in AEP Texas, to comply with this directive in their initial submissions of ATC divisions. See November '06 Decision at 3. The parties in this case and in AEP Texas did so and the Board accepted these calculations. See December '07 Decision at 13-14.

In their ISO evidence, WFA/Basin utilized on-SARR densities in its ATC calculations. BNSF objects to this approach and proposes to substitute the incumbent's traffic densities for the on-SARR density calculations. The Board should reject BNSF's

request because it too is a collateral attack on the Board's Major Issues decision, violates the Board's directive in this case not to relitigate settled issues: and it is methodologically incorrect. See Part III-A-3 below.

**6. WFA/Basin Should Not Be Penalized For Following the Rules**

WFA/Basin very carefully calculated the revised SARR's revenues using Board-approved procedures and precedents. WFA/Basin did not engage in any efforts to change those rules because the Board instructed them not to do so. BNSF, however, has taken a different tack and asked the Board to make wholesale changes in its rules for calculating the revised LRR's revenues. See Part III-A below. WFA/Basin should not be penalized for following rules which BNSF chose to ignore. Moreover, WFA/Basin have already been faced, mid-case, with wholesale changes in the Board's revenue rules, which have required WFA/Basin to expend substantial monies to develop a modified SARR that provides relief under the new rules. It is completely unfair, particularly given the history of this case, for the Board to contemplate, much less accept, BNSF's proposals to once again change the revenue rules.

**D. WFA/BASIN HAVE CORRECTLY CALCULATED THE REVISED LRR's OPERATING EXPENSES AND ROAD PROPERTY INVESTMENT COSTS**

In their TSO evidence, WFA/Basin's expert operating and engineering witnesses made changes to the original LRR's route, track configuration, operating plan, operating expenses, and road property investment costs. The changes to the configuration (principally the route extension from East Guernsey, WY to Northport, NE) and operating plan were supported and verified by a simulation of the revised LRR's

peak-period operations using the Board-approved RTC Model. The changes were summarized at pp. I-8-11 of WFA/Basin's TSO Narrative.

In its TS Reply "Basic Case," BNSF largely accepts the specific changes WFA/Basin made to the original LRR's route, track configuration, yard configuration, operating plan, operating expenses, and road property investment costs. However, BNSF did object to a few of WFA/Basin's assumptions and calculations. On Rebuttal, WFA/Basin accept some BNSF proposed changes and rejects others. The Board should accept WFA/Basin's TS Rebuttal calculations of the revised LRR's operating expenses, and the revised LRR's road property investment costs, since they clearly constitute the best record evidence.

**1. WFA/Basin Properly Designed the Revised LRR System**

BNSF proposes only two minor changes to the LRR's revised route and track configuration in Part III.B of its TS Reply Evidence. These are (a) the extension of the LRR's route by 2.5 miles at Northport to enable certain LRR coal trains to reach the location on UP's tracks where these trains are interchanged between BNSF and UP in the real-world, and (b) the addition of a two-mile passing siding on the added portion of the route between East Guernsey and Northport that WFA/Basin included in their revised RTC simulation but failed to include in their TSO track miles and construction costs. As noted in Part III-B-1 below, WFA/Basin have accepted both of these changes.<sup>25</sup> The net

---

<sup>25</sup> The 2.5-mile route extension at Northport is via trackage rights over UP that replicate rights BNSF presently has and for which it pays no trackage rights fee to UP. Thus the extension does not involve any additional constructed miles or lease costs. See Part III-B-1-a below.

result is that the parties agree that the LRR has 303.95 route miles, of which 301.45 miles are constructed by the LRR and 2.5 miles are UP-owned joint facility miles, and 406.21 track miles.

With respect to yards, BNSF has accepted the relocation of the former Guernsey Yard to Orin (and its revised track and facilities configuration), as well as the elimination of the LRR's original yards at Donkey Creek and South Logan. These changes were made in the original LRR due to the revised LRR's reduced traffic volume and the elimination of the interchanges with BNSF at Donkey Creek and Campbell. BNSF did assert that WFA/Basin failed to provide for vehicular access to both sides of Orin Yard in order to reach the locomotive servicing and maintenance facilities. As shown in Part III-C-4-a below, WFA/Basin concur that one grade-separated road providing vehicular access to both sides of the yard is needed, but not two as proposed by BNSF. They have accepted BNSF's location, configuration, and construction costs for the principal road crossing proposed by BNSF.

**2. WFA/Basin's Operating Plan Is Fully Supported  
and Its Calculation of the Revised LRR's  
Operating Expenses Is Correct**

BNSF has accepted the LRR's revised operating plan, with a few exceptions related to the dwell times at Northport for LRR coal trains interchanged with BNSF and UP at that point; train crew on-duty time and personnel requirements; and certain inputs to the RTC model related to random outages, crew changes, and minor track coding changes.

As explained in detail in Parts III-C-1-a and III-C-2-a below, some of BNSF's proposed modifications to the revised LRR's operating plan and BNSF's proposed input changes into the RTC Model are appropriate, while others are not. WFA/Basin incorporated the appropriate changes into the RTC Model and re-ran it (successfully) for purposes of calculating train cycle times and operating statistics related to train cycle times. As described in Part III-C-2-b below, the rebuttal RTC simulation resulted in minor changes to train cycle times (and the related operating statistics), but the revised LRR's cycle times in the peak year remain well below BNSF's actual cycle times for the base year. This is true for all of the LRR's traffic, including rerouted traffic.

With respect to the LRR's revised annual operating expenses, BNSF posits base-year operating costs of \$112.4 million compared with WFA/Basin's TSO figure of \$105.1 million – a difference of \$7.3 million. As explained in Part III-D below, the differences are primarily attributable to locomotive ownership, maintenance and operating expenses (which are driven in large measure by the train cycle times produced by the parties' respective RTC simulations), train & engine personnel (same along with increased travel time for certain Orin-based crews), and maintenance-of-way.

WFA/Basin have accepted a number of BNSF's proposed changes in annual operating expense while rejecting others. They have also made changes as a result of the revised cycle times resulting from their rebuttal RTC simulation. The net result is that WFA/Basin have increased the LRR's base-year operating expense to \$110.0 million, thus narrowing the difference between the parties to less than \$2.4 million. For the

reasons set forth in TS Rebuttal Part III-D, the Board should accept WFA/Basin's revised annual operating expense as the best evidence of record on this issue.

**3. WFA/Basin Has Correctly Calculated the Revised  
LRR's Road Property Investment Costs**

In their TSO Evidence WFA/Basin developed revised road property investment costs for the revised LRR system of \$869.7 million. In developing these costs WFA/Basin's engineering experts used the same methodologies and unit costs approved by the Board in the September '07 Decision. In its TS Reply evidence BNSF proposes to increase the LRR's road property investment costs to \$901.5 million, which is \$31.8 million higher than the costs developed by WFA/Basin. Most of the difference is attributable to changes BNSF proposes for the Orin Yard to provide grade-separated access roads from one side of the yards as well as access roads for fueling trucks between the yard tracks, and to replace the culverts that WFA/Basin's engineers used to accommodate water flow from nearby drainage areas.

For the reasons set forth in Subpart I of Part III-F below, WFA/Basin's operating and engineering experts disagree with BNSF's proposed changes at Orin Yard except for the need to provide one access road so that vehicles can travel from one side of the yard to the other, which they accept. The cost for that access road as developed by BNSF have been included in WFA/Basin's rebuttal restatement of the LRR's road property investment costs.

BNSF also makes several other relatively minor corrections to WFA/Basin's TSO investment costs. As explained in Subpart II of Part III-F below,



WFA/Basin's engineers except most of these corrections. The net result is that WFA/Basin have increased the LRR's road property investment costs to \$881.2 million, thus reducing the difference between the parties to only \$20.3 million. WFA/Basin's revised road property investment costs as presented in Part III-F below are amply supported by the evidence and should be accepted by the Board.

**E. THE BOARD SHOULD CALCULATE THE REVISED LRR'S CAPITAL COSTS USING CAPM**

In its February '08 Decision, the Board asked the parties to develop equity costs for the revised LRR using three different approaches – the Board's new CAPM method to calculate the rail industry's cost of capital applied in all DCF time periods ("All CAPM Method"); the Board's single-stage DCF method to calculate the rail industry's cost of capital applied in years 2002 to 2005, with equity costs set for all subsequent time periods using the Board's calculation of the rail industry's 2006 cost of capital (using CAPM) ("Hybrid Method"); and the Board's single-stage DFC method applied in all DCF time periods ("Single-Stage DCF Method"). Id. at 6. The Board also asked the parties to address which of these three methods should be used to calculate the revised LRR's capital costs. Id.

In their TSO evidence, WFA/Basin calculated the revised LRR's forecasted cost of equity to 2024 under each approach – 10.41% (All CAPM Method), 11.13% (Hybrid Method), and 13.14 % (Single-Stage DCF Method). WFA/Basin also presented substantial evidence and argument demonstrating, inter alia, that the Board should use the All CAPM Method to set the revised LRR's cost of capital because that method produced

the most accurate calculation of the LRR's cost of equity. Additionally, WFA/Basin demonstrated that if the Board did not adopt the All CAPM Method, the Hybrid Method was the "next best" approach to determine the revised LRR's cost of equity.

In its TS Reply evidence, BNSF argues that the Board lacks the legal authority to utilize the All CAPM Method to set the revised LRR's cost of equity and, in any event, the Board should not do so for policy reasons. BNSF also claims the Board's Hybrid Method impermissibly deviates from the Board's prior practice of forecasting SARR equity costs using an average multi-year historic period data. BNSF asks the Board to set the revised LRR's cost of equity using a modified version of the Board's Single-Stage DCF Method. BNSF's procedures produce a forecast cost of equity of 12.91%.

As discussed in Part III-G, WFA/Basin continue to use the All CAPM Method on rebuttal. The Board clearly has the legal authority to set the revised LRR's cost of equity using the All CAPM method and the Board should do so for the reasons set forth in WFA/Basin's opening evidence. If the Board does not decide to utilize the All CAPM Method, the Board should use the Hybrid Method. Finally, the Board should reject BNSF's subsidiary contention that WFA/Basin erred in restating base period variable costs using CAPM.

**1.     The Board Clearly Has the Legal Authority to Adopt the All CAPM Method**

The Board's All CAPM Method calls for the parties to calculate the revised LRR's cost of equity as equaling for years 2002 through 2005 the rail industry's cost of

equity, restated using CAPM; the Board's calculation of the 2006 rail industry cost of equity using CAPM; and for subsequent years, a forecast cost of equity equal to the average rail industry cost of equity, calculated using CAPM, for the 2002 to 2006 time period. BNSF argues that the Supreme Court's 1932 decision in Arizona Grocery<sup>26</sup> strips the Board of jurisdiction to restate the LRR's capital costs in years 2002 through 2005 using CAPM.

In Arizona Grocery, the Supreme Court addressed a case where the ICC had prescribed maximum reasonable rates on sugar transported by rail from California points to Phoenix, AZ. The involved carriers set rates that complied with the ICC's order. Four years later, the ICC determined that the rates it had previously set were too high and prescribed lower rates. The ICC also held that shippers could collect reparations on specified shipments moving during the prior four year period where the shippers paid rates that exceeded the rates prescribed by the ICC in its second decision. See id. at 381-83.

The Supreme Court concluded in Arizona Grocery that the ICC lacked the statutory authority to award reparations on the facts presented. The Court found that when the ICC approved or prescribed a rate, the ICC acted in a "quasi-legislative capacity" and could not thereafter in an administrative adjudication retroactively change a rate prescription and award refunds. Id., 284 U.S. at 388; see Major Issues at 73 (in Arizona Grocery "the Supreme Court held that the ICC could not award reparations to a

---

<sup>26</sup> Ariz. Grocery Co. v. Atchison, Topeka, and Santa Fe Ry., 284 U.S. 370 (1932) ("Arizona Grocery").

complaining shipper with respect to past shipments that had moved under previously approved and prescribed rates”). Arizona Grocery does not set the governing legal standard here for several reasons.

First, Arizona Grocery addresses an agency’s power to retroactively change prescribed rates. See Major Issues at 73 (under Arizona Grocery, “the lawfulness of rates approved and prescribed pursuant to 49 U.S.C. 10704(a)(1) cannot be challenged with respect to traffic that has moved prior to the date of a reopening” of the prescription decision); BP West Coast Prods., LLC v. FERC, 374 F.3d 1263, 1304 (D.C. Cir. 2004) (“Arizona Grocery applies only where the Commission has declared what is the maximum reasonable rate to be charged by a carrier”) (internal quotation marks omitted); Verizon Tel. Cos. v FCC, 269 F.3d 1098, 1107 (D.C. Cir. 2001) (“Arizona Grocery deals only with the power of the ICC to award reparations to shippers for unreasonable rates that they had paid to carriers”). Here, no rate prescription exists, so the issue raised has nothing to do with making retroactive changes in prescribed rates. Instead, the issue is how to determine the revised LRR’s cost of equity.

Second, even if the Arizona Grocery case holding did apply here, which it does not, BNSF’s argument still would not prevail because neither the STB’s annual cost of capital determinations, nor the Coal Rate Guidelines, prescribe annual cost of capital determinations that must be used in maximum rate cases. The Board makes its annual cost of capital determination for purposes of making annual revenue adequacy determinations. These annual decisions state that the Board “may” use the cost of capital determinations for other purposes, including in maximum rate cases, but the decisions do

not require or “prescribe” this result. Similarly, the Coal Rate Guidelines do not require or prescribe the use of the Board’s annual cost of capital determinations in maximum rate cases. See id., 1 I.C.C.2d at 544 n.63 (establishing a rebuttable presumption that Board will apply industry cost of capital determinations in determining a SARR’s cost of capital).

Third, the governing legal principles here are those the Board articulated in its Major Issues brief on appeal: the Board “ordinarily applies new rules to all pending cases.” See Joint Brief of the Surface Transportation Board and United States of America at 58, BNSF Ry. v. STB, No. 06-1372 (D.C. Cir. Jan. 8, 2008). Where the new rule changes prior standards, the Board will give parties “an opportunity to introduce evidence bearing on the new standard” and “when an affected party has detrimentally relied” on the prior standards, the Board “should weigh those reliance concerns against the harm associated with applying the older standards in deciding whether to apply the new rules or standards.” Id. This formulation was accepted by the reviewing court. See BNSF Ry. v. STB, 526 F.3d 770, 784 (D.C. Cir. 2008).<sup>27</sup> BNSF tries to avoid recitation of the correct legal standard because, as demonstrated in WFA/Basin’s TSO and TS Rebuttal evidence, there is no question that the Board must adopt the All CAPM Method under any fair application of these standards.

---

<sup>27</sup> BNSF maintains that these standards are not applicable because the Board did not promulgate legislative rules in Major Issues. This argument is wrong because the Board did promulgate legislative rules in Major Issues. See Major Issues (STB served Apr. 14, 2006) at 3, 4 (Board’s Major Issues proceeding is a “rulemaking proceeding” and Board’s proposed new SAC rules are a product of “its legislative rulemaking powers”).

## **2. Application of the All CAPM Method Produces the Most Accurate Results**

BNSF argues that WFA/Basin have not demonstrated use of CAPM capital costs in years 2002 through 2005 produces more accurate equity cost calculations than the use of the Board's single-stage DCF procedures. IS Reply Narr. at I-34-37. However, that is not the case. The Board concluded in Cost of Capital<sup>28</sup> that the CAPM methodology was "superior" to the single stage DCF methodology and produced "more accurat[e]" calculations of railroad equity costs.<sup>29</sup>

In their TSO evidence, WFA/Basin restated the rail industry's cost of equity in 2002, 2003, 2004, and 2005 using the "superior" CAPM procedures. This calculation showed that in each of these years, application of CAPM produced lower equity costs than the equity costs determined using the single-stage DCF approach.

<b>TS Rebuttal Table I-3 WFA/Basin TSO Calculation of Industry Cost-of-Equity Using CAPM and Single Stage DCF (2002-2005)</b>		
<b>Year</b>	<b>Equity Cost CAPM</b>	<b>Equity Cost (Single Stage DCF)</b>
2002	10.0%	12.6%
2003	9.9%	12.7%
2004	10.4%	13.2%
2005	10.6%	15.25

---

<sup>28</sup> Methodology to be Employed in Determining the R.R. Indus. Cost of Capital, STB Ex Parte No. 664 (STB served Aug. 14, 2007) ("Railroad Cost of Capital I") and (STB served Jan. 17, 2008) ("Railroad Cost of Capital II") (collectively, "Railroad Cost of Capital").

<sup>29</sup> Railroad Cost of Capital I at 6, 4.

BNSF does not dispute WFA/Basin's calculations of the rail industry's cost of equity, restated using CAPM, for the 2002 through 2005 time period. This should be the end of the matter. As stated, the Board concluded in Railroad Cost of Capital that the CAPM method was "superior" to the single-stage DCF method and produced more "accurat[e]" results. WFA/Basin applied the superior CAPM method and those results, not the results using an inferior method, to be used to calculate the revised LRR's cost of equity. See Parts III-G and III-H below.

BNSF also argues that the Board did not find any methodological "flaws" in single-stage DCF methodology that would call into question to accuracy of the Board's pre-2006 cost of equity calculations. TS Reply Narr. at I-35. Again BNSF is wrong. The Board found in Railroad Cost of Capital that the single-stage DCF procedure did contain a critical flaw – those procedures mistakenly assumed that "the 5-year growth rate" in short term annual earnings growth rates "will remain constant forever." Railroad Cost of Capital II at 6. As the Board explained, "when the 5-year growth rate is very high, this model may overstate the cost of equity" because "the growth rate of a particular industry cannot exceed the long-term growth rate of the economy indefinitely" and when the "5-year growth rate is very low, the model may understate the cost of equity," as the model assumes the growth rate of the railroads will forever remain below the growth rate of the national economy. Id.

WFA/Basin submitted expert testimony, which BNSF does not dispute, demonstrating that the 5-year growth rate used in the Board's single-stage DCF calculations in years 2002 through 2005 were high, ranging from 11.00% to 13.66%.

Obviously, it is completely unrealistic to assume that 5-year growth rates of this magnitude will continue in perpetuity. See S.P. Pratt, Cost of Capital: Estimations and Applications 113 (2d ed. 2002) (“It is theoretically impossible for the sustainable growth rate for a company to significantly exceed the growth rate in the economy. Anything over 6-7% perpetual growth rate should be questioned carefully.”) Thus, one reason why the CAPM equity cost calculations produce superior and more accurate, lower results when applied to the rail industry in years 2002 through 2005 is that CAPM does not rely upon the flawed high perpetual growth rate assumptions used in applying the single-stage DCF procedure in these years. See Part III-G-1 below.

The Board also observed in Rail Cost of Capital II that “single stage DCF models had fallen into disfavor in the finance and academic communities” and CAPM “has become the industry norm.” Id. at 5, 18. The Board’s conclusions here were not based on events occurring in 2006. CAPM had been the industry norm for over a decade. See R. Bruner et. al., Best Practices in Estimating the Cost of Capital: Survey and Synthesis, Financial Practice and Education (Spring/Summer 1998), at 15 (“CAPM is the dominant model for estimating the cost of equity”); Green, Lopez & Wang, Formulating the Imputed Cost of Equity Capital for Priced Services at Federal Reserve Banks, FRBYU Econ. Policy Rev. (Sept. 2003), at 56 (“CAPM is still the most widely used model in classrooms and the financial industry for calculating the cost of capital”).

Use of a correctly calculated cost of equity is particularly important in a SAC case. In SAC cases, a SARR is permitted to enter a market free of any barriers to entry. CAPM produces equity cost calculations that more accurately reflect the equity



costs BNSF and other large railroads were actually incurring in the 2002 through 2005 time frame. Imposing a higher cost of capital, using an outdated methodology, not only produces an inflated equity cost, it produces an impermissible barrier to entry. See TSO Narr. at I-17-19.

**3. The Board's Use of the All CAPM Method Will Not Disrupt Settled Expectations and Cause Disinvestment In the Rail Industry**

Restating the LRR's cost of equity for years 2002 to 2005 also does not unsettle any cognizable reliance interests. BNSF has repeatedly stated that it did not consider, much less rely upon, the STB's maximum rate standards in establishing the tariff rates on the LRS traffic. Nor does the use of the All CAPM Method materially impact BNSF's SAC calculations in this case. Under BNSF's proposed calculations, the revised LRR's revenues do not exceed its costs, with or without calculating the revised LRR's equity costs using CAPM.

Without any reliance interests of its own to advance, BNSF trots out two finance consultants (Hamada/Gokhale) who argue that utilizing CAPM to calculate the revised LRR's capital costs for years 2002 through 2005 "could decrease railroads' and investors' willingness to undertake future investments" and, as a result, "risk chaos in the regulatory system." TS Reply Exhibit III-G.1. These claims are ludicrous.

WFA/Basin asked Dr. James E. Hodder, the Charles and Laura Albright Professor of Finance at the University of Wisconsin, Madison, to review Hamada/Gokhale's claims. See TS Rebuttal Exhibit III-G-1 (Verified Statement of Dr. Hodder). Dr. Hodder concludes that it is very unlikely that the Board's CAPM decisions

in this case will have any adverse impact on railroad investors and that, in any event, any adverse impact on investors (however hypothetical) must give way to the greater public interest in insuring the STB utilizes the best means available to it to calculate the rail cost of capital in this case, which Dr. Hodder emphasizes is CAPM. Dr. Hodder's conclusions are buttressed by the well-known facts in the rail transportation industry, as well as the Board's own findings in Railroad Cost of Capital. See Part III-G-1-d below.

The Board, the ICC before it, and reviewing courts have long recognized that railroads are not a "heavily regulated" industry and that "most rates are not subject to maximum rate regulation." Simplified Standards at 14 n.19; accord Railroad Revenue Adequacy – 1988 Determination, 6 I.C.C.2d 933, 941 (1990) ("1988 Revenue Adequacy Determination"); Ass'n of Am. R.Rs. v. ICC, 978 F.2d 737, 741 (D.C. Cir. 1992).

Indeed, the Board recently informed Congress that only 8.7% of all rail shipments are potentially subject to the Board's maximum rate jurisdiction<sup>30</sup> and, of this 8.7% total, there are only two pending maximum coal rate cases at the STB, which involve a tiny fraction of the nation's rail freight. Clearly, no rational investor is going to be swayed in his or her investment decisions on how the STB determines a SARR's cost of equity in these two cases. The issue will also be moot in future cases since most SARRs use a three-year construction period and, in new cases, that period is likely to start no earlier than 2006 (the first year the Board adopted CAPM).

---

<sup>30</sup> See Rail Competition and Service: Hearing Before the H. Comm. on Trans. and Infrastructure, 110th Cong. 548 (2007) (statement of Charles D. Nottingham).

Moreover, as the Board found in Railroad Cost of Capital, investors have been relying on CAPM for years in their evaluations of railroad profitability. Railroad Cost of Capital I at 4, 6. The fact that the STB will set the revised LRR's cost of equity using the same principles investors have used for years will not undermine investors' reasonable expectations or discourage investment in the rail industry. See 1988 Revenue Adequacy Determination, 6 I.C.C.2d at 941 ("[g]iven the relaxed regulatory environment in which the railroads' now operate, we seriously doubt that railroad investors will withdraw their capital from the rail industry merely because we have chosen to use the same methodology for measuring railroad investment that other business enterprises use for measuring their investments").

Finally, the Board considered and rejected similar carrier contentions in Railroad Cost of Capital. In Railroad Cost of Capital, the railroad industry argued that the Board should not adopt CAPM because this result might chill investments in the rail industry. The Board rejected the industry's contentions, *inter alia*, on grounds that "[w]e will not knowingly select an approach that would systematically overstate the cost of equity" because such an outcome would not protect "shippers' interests in not paying unreasonable rates" and "would contravene the statutory directive that we base our regulatory policies on accurate cost data." Railroad Cost of Capital II at 11.

#### **4. Use of the All CAPM Method Is Consistent With Board Precedent**

The Board's application of the CAPM Method to set the revised LRR's cost of equity is consistent with Board's actions in Major Issues. In Major Issues, the Board

adopted several new rules, including the ATC method to set cross-over traffic divisions, the MMM approach to allocate SARR revenue reductions, the hybrid RCAF-A/RCAF-U index to forecast SARR operating expenses, and the unadjusted cost approach for calculating jurisdictional threshold variable costs. The Board determined that each of these rules was superior to the practices the rules were replacing and determined it would apply them all in the time periods at issue in the three pending rate cases. Thus, the Major Issues rules apply to all calculations made in the SAC analysis, including those for years prior to the date the Board issued Major Issues.

The Board must follow the same approach with CAPM. The Board has found that CAPM is the best method to calculate the industry's cost of capital. The Board must apply the CAPM method to set the revised LRR's cost of equity in all time periods covered in the SAC analysis, including the periods prior to the date the Board first applied the CAPM method to determine the rail industry's cost of capital. Any other approach constitutes an unexplained, and unexplainable, departure from the Board's actions in Major Issues.

Application of the CAPM Method also is fully consistent with the Board's actions in Simplified Standards. As WFA/Basin discussed in their TSO Narrative, the Board publishes R/VC ratios each year for application in small rate cases. In Simplified Standards, the Board changed the methodology it used to calculate these ratios. Id. at 19. The Board proceeded to recalculate the ratios for several prior years (2002 to 2005) and

directed the parties in a pending small rate case to use the adjusted ratios in their pending case filings.<sup>31</sup>

**5. The Board's Hybrid Method  
Is the Next Best Approach**

In their TSO evidence, WFA/Basin asked the Board to adopt the Hybrid Method to set the revised LRR's cost of equity if the Board did not adopt the CAPM Method. Under that approach, the revised LRR's cost of equity in years 2002 through 2005 is set using the single-stage DCF method and, the cost of equity in all future years is set using the Board's 2006 calculation of the rail industry's cost of equity using CAPM. BNSF argues that the Board should reject the Hybrid Method because it does not follow the Board's historic practice of using a multi-year average to project the SARR's cost of capital.

BNSF is correct that the Board in the past has used a multi-average period, but in each case, the average periods were periods in which the now discredited single-stage DCF procedure was applied. Even BNSF concedes that the Board found CAPM to be the superior procedure, starting with the industry's 2006 cost of capital calculation and "going forward" thereafter. TS Reply Narr. at I-41. Under these circumstances, it is far

---

<sup>31</sup> See E.I. du Pont de Nemours and Co. v. CSX Transp., Inc., STB Docket No. 42099 et al., (STB served Jan. 22, 2008) at 2-3. BNSF also argues that WFA/Basin cannot challenge the Board's cost of capital determinations without first seeking to reopen the proceedings where the determinations were made. Board counsel has rejected this argument. See Joint Brief of the Surface Transportation Board and United States of America at 46, Western Coal Traffic League v. STB, No. 07-1064 (D.C. Cir. Oct. 24, 2007) (shipper can raise issue of restating industry cost of capital in "its individual rate case" and is not required to ask the Board to reopen the "broader . . . cost of capital proceeding[s]").

better for the Board to use a single-year cost of equity computation using CAPM than an average that is heavily weighted with equity costs using a method the Board has now rejected. See Part III-G-1-e below.

BNSF also cites the Board's decision in Rail Cost of Capital III<sup>32</sup> in support of its attack on the Board's Hybrid Method. In Rail Cost of Capital III, "[t]he Board is seeking comments on the use of a multi-stage Discounted Cash Flow Model to complement the use of [CAPM] in determining the railroad industry's cost of capital." Id. at 1. BNSF argues that since the Board is considering using two methods in calculating the industry's cost of capital for future years, it should similarly use two methods (single stage DCF and CAPM) in calculating the forecast LRR's cost of equity.

The error in BNSF's logic is self-evident. In Railroad Cost of Capital III, the Board reaffirmed that the single-stage DCF model it had used between 1981 and 2005 was now significantly flawed and could not be used to make future cost of capital determinations. Instead, the Board expressed interest in exploring whether the Board could craft a new multi-stage DCF procedure that would be as methodologically sound as CAPM and produce results that "complement[ed]" CAPM. Id. The Board's Railroad Cost of Capital III decision confirms, once again, that the Board will not use the discredited single-stage DCF procedures to calculate rail industry equity costs in future

---

<sup>32</sup> Use of a Multi-State Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital, STB Ex Parte No. 664 (Sub-No. 1) (STB served Feb. 11, 2008) ("Railroad Cost of Capital III").

years. The Hybrid Method properly eschews any reliance on the discredited single-stage DCF procedures in making SARR equity cost forecasts. See Part III-G-1-c below.

**6. WFA/Basin Properly Used CAPM  
to Make Related SAC Calculations**

The Board's February '08 Decision directed the parties to utilize CAPM in two "SAC calculations" – the calculations using the CAPM Method and the Hybrid Method. In addition to calculating the revised LRR's cost of capital, the parties' "SAC calculations" include the use of URCS costs to calculate the jurisdictional threshold variable costs, to calculate the base-year variable costs used in MMM, and to calculate the base year variable costs under ATC. These URCS costs all include a cost of equity component. WFA/Basin developed the URCS equity cost components using CAPM when submitting revised LRR equity cost computations made using CAPM.

BNSF argues that WFA/Basin's calculations of base-year variable costs using CAPM fall outside the scope of the Board's February '08 Decision and that WFA/Basin did not explain the reasons why they made these computations. See TS Reply Narr. at I-23. WFA/Basin made these computations because they thought the Board asked them to do so and because it did not make any logical sense to restate the industry's cost of equity using CAPM, and then continue to use the discredited single-stage DCF procedure in other "SAC calculations." In any event, these additional restatements, unlike the restatement of the LRR's equity costs, do not cause huge differences in the parties' maximum rate calculations. For example, use of CAPM capital

costs for ATC purposes increases the LRR's revenues. as calculated by WFA/Basin, by less than 1% over the 20-year DCF period. See Part III-A-3 below.

**F. WFA/BASIN ARE ENTITLED TO SUBSTANTIAL RATE RELIEF**

WFA/Basin are entitled to substantial rate relief because the revised LRR's revenues substantially exceed the revised LRR's SAC costs. On TS Rebuttal, WFA/Basin make no changes to their TSO revised LRR revenue calculations and make some modest upward adjustments in their TSO calculation of the revised LRR's operating and construction costs. As computed on TS Rebuttal, the revised LRR revenues exceed its costs by \$47.2 million in 2005 and \$1.5 billion over the 20-year DCF model. See Part III-H-2 below.

BNSF claims that WFA/Basin are entitled to no rate relief because under its "Base Case" calculations, the revised LRR costs exceed revenues by a large margin. TS Reply Narr. at III.II-2. This is due to BNSF's gross understatement of the revised LRR revenues and its overstatement of the revised LRR costs. The Board should accept WFA/Basin's revenue calculations for the reasons set forth above and in Part III-A below. The Board should accept WFA/Basin's rebuttal cost calculations for the reasons set forth above and in Parts III-B through III-G below.

In Major Issues, the Board adopted a new method to allocate SAC relief among the traffic group members – MMM. In their opening evidence, and in this rebuttal filing, WFA/Basin apply MMM in the manner set forth in Major Issues. The maximum rate on the WFA/Basin traffic, using MMM, equals \$2.99 per ton in 4Q04. While claiming WFA/Basin are entitled to no relief, BNSF raises numerous arguments designed



to reduce that relief, including the following: the Board should change its MMM procedures by adopting a “length of haul adjustment” that significantly increases the maximum MMM rates on the issue traffic; the Board should not award any relief to WFA/Basin for shipments moving prior to the Board’s September '07 Decision; the Board should limit any prescriptive relief in this case to 10 years; and the Board should ignore its SAC test results because they afford too much relief to WFA/Basin. See TS Reply Narr. at III-H-9, 1-53, 1-4. All of these contentions lack merit and must be rejected.

**1.     The Board Should Reject BNSF’s  
Length of Haul Adjustment to MMM**

The Board’s MMM procedures call for the parties to calculate the R/VC ratios for each SARR traffic group member’s on-SARR traffic movements and to array those ratios on a highest-to-lowest basis. The parties then calculate a benchmark R/VC ratio which, if all traffic with R/VC ratios above the benchmark were reduced to the benchmark ratio, and all traffic with R/VC ratios below the benchmark remained the same, SARR revenues would equal SARR costs. WFA/Basin applied these procedures both in their TSO evidence and in their TS rebuttal evidence. See Part III-H-3 below.

WFA/Basin are entitled to substantial rate relief because the R/VC ratios on this traffic are the highest in the traffic group – by a wide margin. For example, for the first quarter of 2005, these R/VC ratios averaged 531.5%, which is over {     } percentage points higher than the shipper with the next highest R/VC ratio, and over 319 percentage points higher than the simple average R/VC ratio for the revised LRR’s traffic group. Under the MMM procedures, the maximum rate R/VC benchmark ratio for the revised

LRR equals 212% in 4Q05. This produces a weighed average maximum MMM issue traffic rate of \$2.87 per ton in 4Q05. See Part III-H-4 below.

As discussed above, BNSF first attempts to manipulate the MMM process by unilaterally reducing the R/VC ratios on the revised LRR's rerouted traffic to 0.88. BNSF also proposes a second "length of haul" adjustment to the MMM procedures. See TS Reply Narr. at III-H-9-19. As BNSF explains it, "short-haul" traffic is more demand inelastic than "long-haul" traffic and, as a consequence, BNSF extracts higher mark-ups over cost on "short-haul" traffic than on "long-haul" traffic. Id. BNSF goes on to contend that the Board's MMM procedures are "flaw[ed] and "bias[ed]" because they fail to account for the asserted differences in demand inelasticity between short-haul and long-haul traffic. Id. at III-H-9-18.

BNSF proposes a "length of haul" adjustment to the MMM procedures to address the asserted "flaw[s] and bias[es]" in MMM. Id. Using a complex set of equations and assumptions, BNSF proposes to change the MMM R/VC ratio calculations so that short-haul movements, which under BNSF's procedures include the issue traffic movements, "will receive relatively smaller rate reductions, all else being equal." Id. at III-H-17. According to BNSF, applying its distance adjustment procedures would increase WFA/Basin's MMM rates by over 28% in 1Q05. TS Reply e-workpaper "MMM Implementation Example.xls." The Board should reject BNSF's "length of haul" adjustment for the same reasons it should reject BNSF's rerouted traffic rate adjustment.

First, BNSF's proposed "adjustment" to the MMM procedures is in fact a radical alteration of those procedures, designed and intended solely to decrease the

amount of relief that WFA/Basin can obtain in this case. See Part III-H-3 below. The Board ruled in Major Issues that it would not consider these types of challenges in individual cases because “it is important that the agency apply a uniform approach” and “further debate of these issues [including MMM] within the context of an individual case would defeat much of the purpose of this rulemaking.” Id. at 76. The Board should summarily reject BNSF’s impermissible collateral attack on MMM.

Second, BNSF’s assertions that MMM is “flawed” recycle contentions BNSF and other carriers made, and lost, in Major Issues. BNSF argues here, as it did in Major Issues, that MMM is flawed because it does not properly take into account differential pricing. The Board rejected BNSF’s contentions on grounds that MMM preserves differential pricing within the SARR group, but consistent with basic principles of maximum rate regulation, provides relief only to the most demand-inelastic members of the traffic group. Id. at 14. BNSF’s proposed distance adjustment turns MMM upside-down by not awarding the most relief to the most demand-inelastic traffic.

Third, just as the case with the rerouted traffic adjustment, if the Board permits railroads to make fundamental changes in the MMM procedures on a case-by-case basis, shippers will never know how to model a SARR because in each case they will be met by some form of carrier-sponsored “adjustment” to MMM that reduces or eliminates their relief. The Board intended to put SAC allocation issues to rest in Major Issues by adopting MMM. The Board must adhere to these procedures in this case.

Fourth, as explained in Part III-H-3-b below, the length of haul adjustment is riddled with technical errors. For example, BNSF incorrectly calculated the median

length of haul; BNSF's regression analysis failed to control for all factors that determine each shipper's demand elasticity in the real-world; and BNSF extrapolated its results to the issue traffic's R/VC ratios even though those ratios were well outside of the R/VC ratios tested in the regression.

**2.     **WFA/Basin Are Entitled to Full Prescriptive and Reparations Relief****

WFA/Basin filed their complaint on October 19, 2004 challenging BNSF common carrier rates that became effective on October 1, 2004. WFA/Basin are entitled to prescriptive and reparations relief starting on October 1, 2004.

**a.     **Arizona Grocery Does Not Preclude Full Relief****

BNSF contends that the Board, in its September '07 Decision, "conclusively resolved" WFA/Basin's rate complaint and, as a result, the Board is precluded under the Supreme Court's decision in Arizona Grocery from granting any prescriptive and reparations relief for time periods prior to September 10, 2007, the date the September '07 Decision was served. TS Reply Narr. at 1-42-50.

BNSF's argument starts from a false premise. The Board did not "conclusively resolve" WFA/Basin's complaint in its September '07 Decision. The Board ruled that, on the evidence presented to date, WFA/Basin had not demonstrated that the challenged rates exceeded a reasonable maximum, but the Board acknowledged that WFA/Basin had not been afforded a fair opportunity to make their case. Accordingly, the Board ruled that it would permit WFA/Basin the opportunity to present supplemental

evidence, and if WFA/Basin elected to do so, the Board would make a final decision on the merits of WFA/Basin's complaint. September '07 Decision at 20.

BNSF has made exactly the same argument in judicial proceedings initiated by WFA/Basin. Board counsel correctly rejected BNSF's premise on grounds that the Board has not "conclusively resolved" WFA/Basin's rate complaint:

The fundamental issue before the Board – whether the rates BNSF charged WFA for rail transportation are reasonable under 49 U.S.C. 10701(d)(1) and 10702 – has not been conclusively resolved. In Western Fuels I, the Board determined that WFA had failed to demonstrate that the challenged rates were unlawful "on this record." Western Fuels I, slip op. at 3. But because the Board adopted a new revenue allocation methodology during the proceeding that "clearly could have prejudiced WFA," the Board afforded WFA the opportunity to revise its presentation under the stand-alone cost (SAC) test. Id. WFA has elected to do so. . . . Only after the Board has received and considered the parties' revised evidentiary submissions will it be in a position to resolve conclusively WFA's rate challenge.

Reply of Respondent Surface Transportation Board to BNSF Railway Company's Response to Motion to Dismiss at 2, Western Fuels Ass'n, Inc. and Basin Elec. Power Coop., Inc. v. STB, No. 08-1167 (D.C. Cir. June 6, 2008) ("STB's Reply to Motion to Dismiss").

The fact that the Board has not "conclusively resolved" WFA/Basin's complaint moots BNSF's Arizona Grocery argument. As explained supra, Arizona Grocery applies only to rates the Board has "approved or prescribed." Id., 284 U.S. at

388. Since the Board has done neither in this case, Arizona Grocery does not apply and, as Board counsel informed the reviewing court, WFA/Basin is entitled to “full relief” if the Board finds BNSF’s rates exceed a reasonable maximum:

Relying on Arizona Grocery Co. v. Atchison, Topeka & Santa Fe Ry. Co., 284 U.S. 370 (1932) (Arizona Grocery), BNSF contends that a decision on the parties’ revised SAC presentations could have only prospective effect. But Arizona Grocery only “bars reparations that retroactively change a final Commission-approved rate.” Here, the Board did not approve the challenged rates; it simply found that they had not yet been shown to be unreasonable. Indeed, it would have made no sense for the Board to approve the rates while simultaneously acknowledging that the adoption of a new revenue allocation methodology “clearly could have prejudiced WFA” and affording WFA the opportunity to revise its SAC presentation. Because the Board has not approved the challenged rates, it may award full relief should it find the rates to be unlawful after considering the parties’ revised SAC evidence.

STB’s Reply to Motion to Dismiss at 9-10 (footnote omitted).

WFA/Basin note that, even if the Board had “conclusively resolved”

WFA/Basin’s complaint in its September '07 Decision, which it clearly did not, a Board finding that a challenged rate has not been shown to exceed a reasonable maximum does not mean that the Board has “approved” the rates under Arizona Grocery. It simply means that the rates have not been shown to be unlawful. See, e.g., ICC v. Inland Waterways Corp., 319 U.S. 671, 686-87 (1943) (rates not shown be unlawful are not approved rates under Arizona Grocery); Middle W. Motor Freight Bureau v. United

States, 433 F.2d. 212, 239 (8th Cir. 1970)(same); Halifax Coal & Wood Co. v. Atlantic & Yadkin Ry. Co., 219 I.C.C. 594, 597 (1936)(“the Commission has found in a number of proceedings that the principle announced in [Arizona Grocery] has no application where the assailed rate is a carrier-made rate which has been merely found not unreasonable by the Commission”).

**b. Full Relief Is Not Barred By Limitations Periods**

BNSF argues that the Board is precluded from granting relief to WFA/Basin because the Board has taken longer than three years to decide WFA/Basin’s complaint. TS Reply Narr. at I-47. This delay, BNSF contends, violates the requirement in 49 U.S.C. 10701(c) that “a formal investigative proceeding begun by the Board” be completed “by the end of the third year after the date on which it was begun.” Id.

BNSF’s limitations argument is one that the ICC and this Board have consistently rejected for over 25 years. The ICC and the Board have done so because the text, legislative history, and practical interpretation placed on Section 10701(c), and its statutory antecedents, unequivocally demonstrate that the three-year limitation period does not apply to coal rate complaint actions initiated by shippers. See Complaints Filed Pursuant to the Savings Provisions of the Staggers Rail Act of 1980, 367 I.C.C. 406 (1983); AEP Texas (STB served Nov. 13, 2006); Board’s Xcel Brief at 24-32, STB’s Reply to Motion to Dismiss at 4-9. WFA/Basin will not go chapter and verse through the ICC’s and the Board’s clearly correct statutory construction. The cited authorities are included in WFA/Basin Rebuttal Exhibit I-1. WFA/Basin incorporates the agency’s very careful and thorough statutory construction set forth in Rebuttal Exhibit I-1 materials.

Moreover, if the three-year limitations statute did govern here, which it does not, it would have to be struck down as unconstitutional as applied in this case because its application would deprive WFA/Basin of the due process rights they are accorded under the Fifth Amendment to the United States Constitution. WFA/Basin's cause of action seeking rate relief is a constitutionally protected property right. See Logan v. Zimmerman Brush Co., 455 U.S. 422, 428, 433-34 (1982) (cause of action seeking administrative relief is protected property interest under the Due Process Clause of the Fifth Amendment); Keystone Steel & Wire Co. v. United States, 117 F. Supp. 330, 333 (S.D. Ill. 1953) (cause of action filed at the ICC seeking reparations for rates paid in excess of reasonable maximum rates constitutes property interest under the Due Process Clause of the Fifth Amendment).

The most basic due process right accorded to litigants in judicial and administrative proceedings is the right to have "the opportunity to present his case and have its merits fairly judged." Logan, 455 U.S. at 1156. Where as here, the rules have changed in the middle of the case, due process requires that "litigants must have a meaningful opportunity to submit conforming proof." Hatch v. FERC, 654 F.2d 825, 835 (D.C. Cir. 1981). The Board correctly ruled in its September '07 Decision that WFA/Basin had not yet had the opportunity to have the merits of their case "fairly judged" because WFA/Basin had not had the opportunity to submit appropriate conforming proof – the revised LRR. See id. at 20 ("we believe that fairness dictates that WFA have an opportunity to modify its SAC presentation in light of the new revenue allocation methodology"). Dismissing WFA/Basin's case before WFA/Basin have had



the opportunity to fairly present their case under the Board's new SAC rules clearly violates WFA/Basin's due process rights.

Also, the delays in this case were not caused in any way by WFA/Basin and, indeed, took place over their vigorous and repeated objections. This case was delayed because the Board decided to place it on hold while the Board developed new SAC rules and because the Board did not give WFA/Basin the opportunity to revise the LRR until the Board served its September '07 Decision. Board counsel has informed the reviewing court in this case that "[t]he automatic dismissal of a cause of action due to agency delay violates due process." STB's Reply to Motion to Dismiss at 8 (footnote omitted).

Finally, the Board concluded in AEP Texas that "basic equitable considerations" precluded BNSF from raising the limitations issue in that case because BNSF had represented to AEP in filings made in Major Issues that delays caused by that proceeding would not "prejudice" AEP Texas and because BNSF had not objected to the "extended schedule" in that case. AEP Texas (STB served Nov. 13, 2006) at 6.

The same equitable considerations apply here. BNSF made the same representations in Major Issues to WFA/Basin that it made to AEP Texas and BNSF did not object to the procedural schedules in this case, including the schedule the Board adopted for the submission of supplemental evidence, which was issued after the asserted three-year limitations period had expired, on grounds that receipt of additional evidence was barred under the three-year limitations rule.

**c. Full Reparations Are Required**

BNSF maintains the Board's power to issue reparations in this case is "discretion[ary]." TS Reply Narr. at I-50. BNSF asks the Board to exercise this "discretion" and deny WFA/Basin any reparations because "fairness does not require that any reparations be awarded for the time period preceding [September 10, 2007]." *Id.* at I-51. BNSF is wrong on both counts.

49 U.S.C. § 11704(b) provides that "[a] rail carrier . . . is liable for damages sustained by a person as a result of an act or omission of that carrier in violation of [49 U.S.C. 10101 et seq.]" (emphasis added). The courts have consistently construed this provision, and its statutory predecessors, as requiring the agency to "automatically" award reparations in cases where a shipper demonstrates the challenged rate exceeds a reasonable maximum<sup>33</sup> because "[t]he carrier ought not to be allowed to retain his illegal profit."<sup>34</sup> In maximum rate cases, the "measure of damages is the amount of the excess exacted."<sup>35</sup>

BNSF cites only one court case in support of its contrary position – Genstar Chem. Ltd. v. ICC, 665 F.2d 1304 (D.C. Cir. 1981). In Genstar, the ICC had approved

---

<sup>33</sup> See ASG Indus. Inc. v. United States, 548 F.2d 147, 152 (6th Cir.1977) ("If a rate is found to be unreasonable under [what is now 49 U.S.C. 10701(d)(1)], amounts charged in excess of the reasonable rates are awarded automatically to the shipper as overcharges.")

<sup>34</sup> S. Pac. Co. v. Darnell Taenzler Lumber Co., 245 U.S. 531, 534 (1918) (Holmes, J).

<sup>35</sup> Louisville & Nashville, R.R. v. Sloss-Sheffield Steel & Iron Co., 269 U.S. 217, 235 (1925) (Brandeis, J.).

general rate increases of 14% on some traffic and 12% on other traffic. The ICC found that the involved railroads had mistakenly applied the 14% increases to Genstar's traffic not the 12% increases and directed that the carriers refund the 2% overcharge. Genstar, however, maintained that it should receive refunds in the amount of the entire 14% increase because the carriers had not complied with the ICC's tariff filing rules. The D.C. Circuit affirmed the ICC's rejection of Genstar's claim for recovery of the 14% increase on grounds that "the Commission's award of 2% is consistent with the [Interstate Commerce] Act, which provides not for penalties but compensation for actual harm" and "[t]he 14% award sought by Genstar bears no relation to actual harm." *Id.* at 1309.

Genstar does not support BNSF's position that reparations in maximum rate cases are discretionary. Genstar was not a maximum rate case, it was a rate application case and in that case the reviewing court affirmed the ICC's grant of compensatory relief for overcharges the railroads had unlawfully imposed on Genstar's traffic. Aside from Genstar, the only other case BNSF cites is a 1977 ICC decision in the PEPCO case.<sup>36</sup> The PEPCO case had a long and tortured history as PEPCO was caught up in the ICC's see-saw efforts to set new maximum coal rate standards – efforts that were not resolved until the Board promulgated the Coal Rate Guidelines in 1985.

---

<sup>36</sup> Potomac Elec. Power Co. v. Penn C. Transp. Co., 359 I.C.C. 222 (1977) ("PEPCO II").

In PEPCO, the ICC addressed the maximum reasonableness of rail rates to three PEPCO plants. The Board found in PEPCO I<sup>37</sup> that rates to one of the plants exceeded a reasonable maximum based upon the rate standards then in effect but refused to prescribe new maximum rates given the unresolved issues of what standards should be used to set maximum coal rates. In PEPCO II, the decision cited by BNSF, the ICC prescribed a maximum rate on the traffic but did not order reparations for past overcharges. The ICC claimed it had the authority not to order reparations “when there is good and sufficient reason for [not] doing so” (id. at 241) and focused on the issue of whether reparations would be passed through to PEPCO’s customers in denying reparations:

The prescription of rates for the future reducing PEPCO’s cost, unlike an award of reparations for the past, will ultimately benefit the consumers of PEPCO’s services. We have been offered no assurance that PEPCO would grant refunds to the consumers based on an award of reparations.

Id.

PEPCO II was an aberration at the time it was decided. In other contemporaneously decided cases, the ICC followed governing court precedent and held that if a rate was shown to be unreasonable, reparations were mandatory. See, e.g., Inspection in Transit, Grain and Grain Products, 359 I.C.C. 624, 30 (1979) (“when rates are demonstrated to have been unreasonable when imposed, the money collected must be

---

<sup>37</sup> Potomac Elec. Power Co. v. Penn C. Transp. Co., 356 I.C.C. 815 (1977) (“PEPCO I”).

paid back"); ASG Indus. Inc. v. Aberdeen and Rockfish R.R., 355 I.C.C. 1, 4 (1977) ("reparations are automatically awarded" when rates are shown to exceed a reasonable maximum).

PEPCO II also has had no precedential effect. In every rate case decided under the Coal Rate Guidelines, the ICC, and later the STB, have correctly applied the law and awarded reparations to complainant shippers in cases where the agency has found the challenged rates exceed a reasonable maximum.<sup>38</sup>

Even if the Board did have discretion to deny WFA/Basin reparations there is no basis for doing so in this case. Unlike PEPCO II, WFA/Basin have repeatedly informed the Board that they are not-for-profit entities and the reparations they receive will be flowed through to their consumers. Nor is it "unfair," as BNSF contends, for WFA/Basin to receive reparations in this case. WFA/Basin's reparations claim seeks the return of monies they have paid that exceed the maximums permitted by law. The right and fair thing to do is to return these unlawful payments to WFA/Basin, and their consumers, because, as Justice Holmes aptly concluded nearly a century ago, "[t]he carrier ought not to be allowed to retain his illegal profit." Darnell Taenzer Lumber, 245 U.S. at 534.

---

<sup>38</sup> See Xcel; TMPA; WPI; FMC; WTU; APS; Omaha Pub. Power Dist. v. Burlington N. R.R., 3 I.C.C.2d 123 (1986) ("OPPD"); Ark. Power & Light Co. v. Burlington N. R.R., 3 I.C.C.2d 757 (1987) ("APL").

**d. The Prescription Period Is 20 Years**

BNSF requests that the Board limit any prescriptive relief in this case to 10 years, not 20 years. The Board must deny this request as it asks the Board to relitigate a settled issue not related to WFA/Basin's revised evidence. The Board ruled in Major Issues (at 75), and reaffirmed in its September '07 Decision (at 8 n.8), that the prescription period in this case is 20 years, starting on October 1, 2004.

Moreover, the Board's DCF analysis period sets the time period for the duration of rate prescriptions. The parties have proceeded in all subsequent filings, including their third supplemental evidentiary filings, to use a 20-year DCF period, not a 10-year period. As the Board held in Major Issues, "shortening the DCF period would require the parties to redesign their entire SARR presentation." Id. at 75. WFA/Basin have already redesigned their original LRR once to address ATC. They should not have to do so a second time to address a shorter DCF analysis period. See Part III-H-4-b below.

**e. The Board Should Prescribe a Single Weighted-Average Rate**

In its TS Reply, BNSF argues against WFA/Basin's determination, through the application of the MMM process, of a single weighted-average for the issue traffic due to its unproven concern that WFA/Basin's shipping patterns may not exactly match those used in the MMM model. See TS Reply Narr. at III.H-4-9. Instead, BNSF asks the Board to prescribe mine-specific rates for the issue traffic in the event that the Board determines WFA/Basin are entitled to any relief. Id. As explained in Part III-H-4-d, BNSF's approach is inconsistent with the MMM methodology for a variety of reasons.

the most of important of which is that the very mine-specific rates that BNSF asks the Board to adopt are entirely dependent on the assumed distribution of traffic. Thus, if the traffic distribution changes, the mine-specific rate changes as well. Moreover, both parties relied on the same traffic distributions for their MMM calculations and all other elements of their SAC calculations. Consequently, it would be inconsistent to deviate from the weighted-average rate produced by that process since those rates are entirely dependent on the inputs, including the distribution of the traffic that each party accepted.

**f. Full Relief Must Not Be Nullified**

Throughout its reply, BNSF asks the Board to reduce or eliminate the relief WFA/Basin are clearly entitled to under the SAC test because BNSF has deemed them “commercially reasonable.” BNSF also asks the Board to reduce or eliminate the relief WFA/Basin are clearly entitled to under the SAC test because BNSF finds the results to be “outlandish.” TS Reply Narr. at I-5. The Board must deny BNSF’s request that the Board nullify or manipulate the SAC test to produce results more to BNSF’s liking.

The maximum rates that WFA/Basin ask the Board to prescribe are in line with the maximum rates the Board has prescribed in previous cases. See, e.g., KCPL; Xcel; TMLPA; WPL. They also provide generous differential pricing returns to BNSF. Over the 20-year DCF period, WFA/Basin estimate they will pay BNSF \$500 million under the prescribed rates, which includes \$252 million in contribution over variable costs. See Part III-H-4-c below.

BNSF repeatedly points to the dollar per ton rates WFA/Basin pays and claims that they are “low” in relation to other coal rates on its system. See, e.g., TS Reply


Narr. at I-2, I-4. This metric cannot, and never has been, used as a measure of maximum rate reasonableness.<sup>39</sup> Maximum rate reasonableness is rooted in the relationship of rates-to-costs. At the STB, the pertinent costs are variable costs incorporated into the jurisdictional threshold and stand-alone costs.

**E. CONCLUSION**

WFA/Basin request that the Board find that the assailed tariff rates exceed a reasonable maximum, prescribe reasonable maximum rates, and award them reparations, with interest, for overcharges incurred since October 1, 2004, in the manner set forth in Part III-H below.

Respectfully submitted,

WESTERN FUELS ASSOCIATION,  
INC. and BASIN ELECTRIC POWER  
COOPERATIVE, INC.

By: John H. LeSeur   
Christopher A. Mills  
Peter A. Pfohl  
Daniel M. Jaffe  
1224 Seventeenth Street, N.W.  
Washington, D.C. 20036  
(202) 347-7170

OF COUNSEL:

Slover & Loftus  
1224 Seventeenth Street, N.W.  
Washington, D.C. 20036

Dated: August 15, 2008

Attorneys for Complainants

---

<sup>39</sup> The metric is also economically unsound. See Part III-H-3-b.



## II Market Dominance

## **II. A. QUANTITATIVE MARKET DOMINANCE**

In their TSO evidence, WFA/Basin calculated BNSF's fourth quarter 2004 jurisdictional threshold variable costs on the five involved issue traffic origin-to-destination ("O/D") pairs using CAPM to calculate the rail industry's cost of equity. The resulting variable costs for each O/D pair were approximately eight cents per ton less than the variable costs calculated using the single-stage DCF method to calculate the rail industry's cost of equity in 2004.

BNSF objects to WFA/Basin's opening calculations on grounds that restating the jurisdictional threshold variable costs is not permitted in these supplemental proceedings. See TS Reply Narr. Part II-A. According to BNSF, the Board intended to limit the parties' CAPM evidentiary filings to restating the SARR's cost of capital, in years 2002 through 2005, using CAPM. Id. In fact, the Board directed the parties to develop CAPM equity costs "for the pre-2006 years in the SAC analysis in this case." February '08 Decision at 6. The "SAC analysis" includes the jurisdictional threshold since the Board lacks jurisdiction to apply the SAC test if the challenged rates fall below the jurisdictional threshold. Also, in cases where the Board does have jurisdiction, and SAC falls below the jurisdictional threshold, the Board will set the maximum rate under the SAC constraint at the jurisdictional threshold level. See, e.g., KCPL; TMPA; WPL.

**Additionally, BNSF claims that the Board is legally precluded from restating the rail industry's cost of capital for years 2002 through 2005 and that WFA/Basin have not demonstrated that application of CAPM during these time periods produces a better estimate of the rail industry's cost of equity than the estimates produced by CAPM. See TS Reply Narr. at I-27-42. WFA/Basin address these BNSF contentions in Part I-A and Part III-G.**

III-A Stand-Alone  
Traffic Group

### **III. A. TRAFFIC GROUP**

#### **1. Stand-Alone Railroad Traffic**

In their TSO evidence, WFA/Basin developed a revised LRR traffic group that consists of WFA/Basin and 20 other utility customers. The revised LRR originates PRB coal traffic that is transported to 24 power plant destinations. The revised LRR transports 63.1 million tons in 2005 and approximately 1.3 billion tons over the 20-year DCF period. These tonnages were calculated using the procedures and data set forth in the Board's September '07 Decision and the electronic workpapers accompanying that decision.

BNSF claims that the revised LRR's traffic group is impermissible because (a) WFA/Basin violated the Board's direction not to present a new SAC case; (b) WFA/Basin impermissibly "excluded" 19 million tons of traffic from the revised LRR; and (c) WFA/Basin impermissibly included rerouted traffic in the revised LRR. See TS Reply Narr. Parts I-B and III-A. Based upon these assertions, BNSF asks the Board to dismiss WFA/Basin's case. Id. at I-15. The Board should not do so for the reasons set forth in Part I above and the narrative discussion below.

#### **a. New SAC Case Claims**

BNSF maintains that the revised LRR's traffic group, configuration, and operating plan violates the Board's directive in its February '08 Decision that WFA/Basin not "submit a new case." Id. at 8. This assertion is incorrect. The Board's September '07

Decision clearly permits WFA/Basin to redesign the original LRR's configuration and to change the LRR's traffic group. See id. at 20 ("WFA may increase or decrease the traffic group, change the configuration of the LRR, and submit evidence on all related issues").

The revised LRR responds to the Board's directive. Any such change, as the Board knows, requires that a complainant shipper develop a new SARR engineering plan; develop a new operating plan; re-run the RTC model; and present supporting revised revenue and cost data. That is exactly what WFA/Basin have done.

The Board's statement that WFA/Basin would not be permitted to "submit a new case" came in the context of the record information the Board stated that WFA/Basin could utilize to develop its revised SARR. See February '08 Decision at 8. The Board ruled in its February '08 Decision, as clarified in its March '08 Decision, that WFA/Basin could revise the LRR using only information in the existing record and additional publicly available information. Thus, WFA/Basin's case was to be limited to the initial, confidential discovery record, compiled several years ago, and publicly available information. This is a markedly different procedure than the one the Board applies in "a new case." In new cases, a shipper starts with a new record, not an old record.

Also, the Board made clear in its September '07 Decision that the parties could not use the supplemental evidentiary proceedings to "relitigate" issues decided in that decision that were not related to WFA/Basin's reconfiguration of the LRR. Id. at 20. In a new SAC case, the parties are free to address all SAC issues. However, in the

supplemental proceedings ordered by the Board in this case, specific limits were placed on relitigating issues already decided. WFA/Basin carefully followed these directives in submitting its ISO evidence.

**b. Traffic Exclusion Claims**

In modeling the revised LRR, WFA/Basin did not include approximately 48.0 million tons of real-world BNSF traffic that originates in the PRB and is routed via Guernsey, WY to Northport, NE. BNSF claims that WFA/Basin impermissibly “excluded”<sup>1</sup> approximately 19.3 million tons of this traffic which, in 2005, had an average R/VC ratio of 0.88.<sup>2</sup>

BNSF’s claim that WFA/Basin improperly “excluded” traffic is wrong because there is no requirement that WFA/Basin include any specific non-issue traffic movements in the revised LRR traffic group. In its September '07 Decision, the Board specifically afforded WFA/Basin the opportunity to change the original LRR traffic group by adding or subtracting traffic. The choice of how to do so was properly left to WFA/Basin. The Board’s action conforms to bedrock SAC principles.

---

<sup>1</sup> See TS Reply Narr. at III.A-13.

<sup>2</sup> See TS Reply e-workpaper “MMM Model Linked to III-H-1 FTI CATC D.xls.” BNSF does not identify any methodology utilized to select the 19.3 million tons.

Under the Board's SAC test, the complainant shipper, not the defendant carrier, selects the traffic group.<sup>3</sup> The complainant shipper has "broad" flexibility to select this group<sup>4</sup> and, in exercising this flexibility, the complainant shipper can choose to include in its traffic group "any subset" of the defendant carrier's traffic that shares facilities with the issue traffic.<sup>5</sup> The shipper is given this broad flexibility because it is responsible for presenting a SARR that maximizes revenues and minimizes costs.<sup>6</sup> The SARR is also not responsible for covering the costs of traffic not included in the traffic group.<sup>7</sup>

BNSF's traffic "exclusion" theory violates each and every one of these core SAC principles. Under the traffic exclusion theory, BNSF, not WFA/Basin, selects the

---

<sup>3</sup> See March '05 Decision at 2 ("[i]t is a long-standing principle in SAC cases that the shipper has the right to select its SARR traffic group").

<sup>4</sup> See Guidelines, 1 I.C.C. 2d at 543 (shipper has "broad flexibility" in selecting a SARR traffic group).

<sup>5</sup> See WTU, 1 S.T.B. at 657 ("the complaining shipper can select any subset of available traffic to determine the least cost at which that subset of traffic could be served independently of other traffic"); APS, 2 S.T.B at 381 (same).

<sup>6</sup> See WPL, 5 S.T.B at 965 n.20 (Coal Rate Guidelines directs shippers to model SARRs that "maximize revenues while minimizing costs"); FMC, 4 S.T.B. at 721 n.51 (same); Duke Energy Corp. v. Norfolk S. Ry., STB Docket No. 42069 (STB served Nov. 6, 2003) at 12 n.11 (same).

<sup>7</sup> See McCarty Farms v. Burlington N. Inc., STB Docket No. 37809 (STB served Feb. 13, 1995), 1995 WL 55449 at \*7 ("[H]ow non-issue traffic not included in the [stand-alone traffic] group would move generally is irrelevant to the hypothetical stand-alone exercise.")



traffic group; the “broad flexibility” accorded to WFA/Basin is gone; the revised LRR does not serve the subset of traffic selected by WFA/Basin; WFA/Basin are deprived of their basic right to obtain relief through modeling a SARR that maximizes revenues and minimizes costs; and the revised LRR is deemed to be responsible for carrying traffic that it has excluded from its group.

BNSF also contends that a “rational SARR” would carry this traffic. See TS Reply Narr. at III.A-13. Common sense dictates that traffic moving at R/VC ratios of less than one is not traffic that a SARR would be interested in carrying. That WFA/Basin did not include traffic moving, on average, at 0.88% of costs, is not surprising. But, more than that, the Guidelines permit the complainant shipper, not the defendant railroad, the right to select the traffic group. WFA/Basin’s traffic choices govern under the Guidelines, not BNSF’s. This rule is predicated upon the basic principle that the complainant shipper should model a SARR that maximizes rate relief available to it under the Board’s SAC standards. Obviously, the defendant carrier does not share this objective. See, e.g., McCarty Farms v. Burlington N., Inc., 2 I.C.C.2d 262, 271 (1988) (“BN has little incentive to develop a least cost [SARR] system”). This result is also fully consistent with the Board’s direction in the September '07 Decision that WFA/Basin could, among other things, eliminate low-rated traffic from its original LRR. Id. at 3, 20 (revised LRR can exclude traffic “offering limited revenue contribution”).

BNSF includes a complex modeling exercise designed to show that WFA/Basin should have included this low-rated traffic in the revised LRR because, under the complex assumptions used by BNSF, it was “profitable” traffic. See TS Reply Narr. at III.A-26-28. BNSF’s asserted proof of the profitability of SARR traffic moving at R/VC ratios that average 0.88% is fatally flawed. WFA/Basin submitted a complete and rigorous SAC analysis that identified a specific traffic group, revenues, peak period data, optimal physical plant, investment costs and an efficient operating plan that minimized operating costs. WFA/Basin’s SAC analysis reflected the operation of a single hypothetical stand-alone railroad called the LRR (“WFA/Basin Base Case”). From a traffic group perspective, BNSF’s primary stand-alone cost analysis included the same traffic that was included in WFA/Basin Base Case (“BNSF Base Case”). BNSF also submitted two additional SARR’s which they called SARR I and SARR II. SARR I contained all of WFA/Basin Base Case traffic except that it excluded approximately 18 million tons of internally re-routed traffic that was included in the WFA/Basin Base Case and included approximately 19 million tons of low-rated traffic (i.e., the traffic moving at the 0.88% ratio) that was not included in the WFA/Basin Base Case. See TS Reply Narr. at III.A-27. SARR II traffic is the same as SARR I traffic except that it excludes the approximately 19 million tons of low rated traffic. Id. According to BNSF, the purpose for submitting these two additional SARR’s is to demonstrate that the low-rated traffic

which was not included in the WFA/Basin Base Case would have been incrementally profitable to the LRR. Id. at III.A-26.

Even if one assumes that a defendant carrier can select the traffic group (which it cannot), BNSF's SARR I and SARR II analyses do not meet the minimum standards of analysis required for a SAC presentation. In particular, BNSF made a number of simplifying assumptions concerning the physical plant, investment, and operating plan required to efficiently serve the revised SARR traffic groups that resulted in stand-alone costs that were not verifiable.

WFA/Basin note, in the first instance, that the LRR was designed to handle the traffic group in the WFA/Basin Base Case and not either of the traffic groups BNSF proposed in SARR I or SARR II. Stated differently, the infrastructure and operating plan used in BNSF's analysis is not an optimal system tailored specifically for the needs of the issue stand-alone traffic group because BNSF did not specifically design the SARR to accommodate SARR I's or SARR II's traffic.

BNSF's SARR I and SARR II cases also did not comply with standard rate case procedures because the RTC models and resulting operating statistics were developed using the trains moving in the peak period of WFA/Basin's Base Case traffic group, rather than the peak week period of the SARR I or SARR II traffic groups, which BNSF did not bother to determine. Indeed, every stand-alone system produces; its own peak period; its own traffic statistics; and its own network configuration, which result in

stand-alone costs specific to the traffic being handled. BNSF did not follow this convention. Consequently, its alternative SARRs are not reliable because they do not accurately reflect the peak period traffic group in each case.

BNSF's derivation of the operating statistics and operating costs for its revised SARRs are also inconsistent with standard practices. Inexplicably, BNSF developed SARR I and SARR II operating statistics and operating costs using its RTC model, then, for an unexplained reason, BNSF developed ratios of these results to the BNSF Base Case and applied these ratios to the WFA/Basin Base Case operating statistics. See TS Reply e-workpapers "Exhibit\_III-H-1 WFA Alt 1.xls," and "Exhibit\_III-H-1 WFA Alt 2.xls." This process resulted in what BNSF refers to as incremental revenues and stand-alone costs generated by the excluded traffic. See TS Reply Narr. at III.A-27-28. A similar process was used to determine the road property investment costs for SARR I and SARR II. If BNSF had used the proper methodology, it would have developed SARR-specific operating expenses and road property investment costs, whose veracity could then be tested directly.

Simply put, the results of BNSF's SARR I and SARR II analyses do not meet the minimum evidentiary standards required to support SAC evidence presented to the Board. BNSF's evidence, therefore, fails to support its proposition that the approximately 19 million tons of low-rated traffic is incrementally profitable.

**c. Rerouted Traffic Claims**

BNSF claims that WFA/Basin impermissibly included rerouted traffic because (i) the Board's decisions in this case preclude WFA/Basin from including rerouted traffic; (ii) WFA/Basin's inclusion of rerouted traffic violates the standards set forth in the Board's PPL decision; (iii) WFA/Basin's use of rerouted traffic "games" the maximum rate process in violation of the standards the Board adopted in Major Issues; and (iv) WFA/Basin failed to meet the standards governing the inclusion of rerouted traffic set forth in the Board's TMPA decision.

**i. The Board's Instructions**

BNSF maintains that WFA/Basin cannot include rerouted traffic in the revised LRR because, according to BNSF, the Board's September '07 Decision, permits WFA/Basin only to "drop some unprofitable traffic." BNSF TS Reply Narr. at III.A-5. Significantly, BNSF never cites or quotes the governing language in the Board's September '07 Decision in support of this claim. The Board's governing instructions clearly state that WFA/Basin "may increase or decrease the traffic group, change the configuration of the LRR, and submit evidence on all related issues (such as revenue from the new traffic or construction costs avoided or added due to a new configuration)." Id. at 20. These instructions clearly permit WFA/Basin to reconfigure the original LRR's traffic group and operating plan to include rerouted traffic.

Moreover, BNSF's reading of the Board's September '07 Decision ignores the reason why the Board afforded WFA/Basin the opportunity to submit revised SARR evidence. WFA/Basin developed the initial LRR configuration in the Winter of 2005. WFA/Basin modeled this railroad to maximize revenues, and minimize costs, using the Board's MSP method to set the LRR's revenues on cross-over traffic. The Board had used MSP, or similar mileage-based methods, to set cross-over traffic divisions for over a decade. In the Winter of 2006, long after WFA/Basin had designed the LRR, the Board proposed in Major Issues to replace the MSP method with ATC. WFA/Basin repeatedly objected to the Board's use of ATC on grounds, inter alia, that retroactive application of ATC was fundamentally unfair to WFA/Basin because they would have designed a different railroad to maximize revenues and minimize costs using ATC.

In its September '07 Decision, the Board acknowledged that "WFA argues strenuously, and persuasively, that had it known that the Board would change the revenue allocation methodology for cross-over traffic, it would have offered a different case." Id. at 3. The Board further agreed with WFA/Basin that the change in revenue allocation methods "clearly could have prejudiced WFA" because the switch from MSP to ATC "would affect the basic design of a SAC case." Id. at 3. Accordingly, the Board offered WFA/Basin the opportunity to submit a revised SARR traffic group, and traffic configuration, "if it believes a revised case could demonstrate that the challenged rate is unreasonable." Id. WFA/Basin's revised evidence makes this showing.

**ii. The PPL Case Instructions**

BNSF claims that WFA/Basin's inclusion of rerouted traffic violates the Board's ruling in PPL, a ruling which BNSF claims the Board relied upon in setting the scope of revised SARR evidentiary submissions in this case. See TS Reply Narr. at III.A-4 (citing the reference to PPL in the Board's February '08 Decision). This contention is way off-base.

In PPL, the complainant shipper ("PPL") used the MSP method to set SARR cross-over traffic divisions. The Board proceeded to issue a decision denying PPL any rate relief. PPL then petitioned the Board, asking for permission, inter alia, to submit a revised SARR it claimed would better maximize revenues and minimize costs using MSP. The Board rejected PPL's request on grounds that PPL had "every incentive from the outset of the case" to maximize revenues and minimize costs using the MSP method. PPL, 6 S.T.B. at 760.

In its petition for reconsideration of the Board's September '07 Decision, BNSF cited PPL in support of its claim that the Board erred in granting WFA/Basin the opportunity to present supplemental evidence.<sup>8</sup> The Board rejected BNSF's argument in its February '08 Decision. The Board ruled that the switch from MSP to ATC did "change[] the incentives for a shipper in the selection of the traffic group to be used" (id.

---

<sup>8</sup> See BNSF's Petition for Reconsideration at 7-8 (filed Oct. 22, 2007)

at 3) and therefore, in this case, unlike PPL, the complainant shippers should be permitted to submit revised SARR evidence.

BNSF also maintains that WFA/Basin had the “incentive” to include rerouted traffic in the original LRR traffic group in order to increase the difference between SARR revenues and costs under MSP.<sup>9</sup> However, that is not the issue here. Unlike PPL, WFA/Basin is not asking the Board to permit it to reconfigure the SARR to obtain relief under MSP – the cross-over traffic divisions methodology in effect when WFA/Basin designed the original LRR. Instead, WFA/Basin is presenting revised SARR evidence in order to obtain relief under ATC – the cross-over traffic divisions methodology that the Board adopted after WFA/Basin designed the original LRR.

BNSF also speculates that WFA/Basin could have obtained a better result by rerouting traffic in its original MSP SARR and building the original SARR to Northport, NE. The only “proof” that BNSF provides in support of this claim is a calculation that purports to show that MSP revenues are slightly higher on WFA/Basin’s rerouted traffic in the revised SARR than the corresponding revenues BNSF calculates for these movements under ATC.<sup>10</sup> Of course, BNSF’s proof is nonsense. The only way for such a demonstration to be made would be for BNSF to first calculate the differential between LRR revenues (calculated using MSP) and LRR costs if the LRR was extended

---

<sup>9</sup> See TS Reply Narr. at III.A-5-6

<sup>10</sup> Id. at III-A-6



to Northport, and included rerouted traffic. That differential would then need to be compared to the differential between the original LRR's revenues (calculated using MSP) and LRR costs, under its original configuration. BNSF does not attempt to make this showing.<sup>11</sup>

WFA/Basin did not include rerouted traffic in the original LRR because such traffic would have been externally rerouted and interchanged with BNSF at Guernsey, WY. Including such traffic would have raised a host of complex issues under the Board's rerouted traffic standards. As summarized by the Board in TMFA:

Redirecting the off-SARR portion of traffic introduces new variables that extend the inquiry well beyond the original parameters of the SAC analysis. Such new variables might include: off-SARR operational issues (such as, in this case, rerouting traffic through the busy rail network in the Houston metropolitan area); off-SARR cost issues (for example, whether the residual carrier would need additional off-SARR facilities to handle traffic along the different route); and whether the revenues from the rerouted traffic would be sufficient to cover the costs over the entire route that traffic would travel from origin to destination, including the off-SARR part. Thus, to reroute non-issue traffic, the complainant's SAC analysis must either take responsibility for the entire movement from origin to destination or fully

---

<sup>11</sup> WFA/Basin note that BNSF argued in its original Reply evidence, filed in July of 2005, that the farther east WFA/Basin extended the original LRR from its original eastern terminus in Guernsey, WY, the less rate relief WFA/Basin would have obtained under the MSP divisions method. See BNSF Reply Narr. at III.A-14.

account for the ramifications of requiring the residual carrier to alter its handling of the traffic.

Id., 6 S.T.B. at 595 (footnotes omitted).

As WFA/Basin explained in 2005, they did not want to complicate the presentation of evidence in this case by including externally rerouted traffic in their original SARR. See WFA/Basin Opening Narr. at 1-13. WFA/Basin's goal, at that time, was to expedite the Board's consideration of their rate complaint in light of the huge rate increases BNSF had imposed on WFA/Basin and the LRS customers. WFA/Basin's goal of expedition has long since gone by the wayside due to the Board's actions in Major Issues and in this case. Given the developments, the Board cannot fault WFA/Basin for modeling a different SARR now than it did in 2005.

Also, with MSP, WFA/Basin did not consider an alternative SARR configuration to Northport, NE. The original LRR's configuration with MSP produced over a \$2 billion positive differential between the original LRR's SARR revenues and its SARR costs,<sup>12</sup> with this differential being allocated to WFA/Basin in the form of rate reductions under the Board's percent reduction procedures. ATC calculates cross-over traffic divisions using substantially different procedures than MSP. WFA/Basin had to consider a different SARR configuration and SARR traffic group in order to maximize SARR revenues and minimize SARR costs using ATC.

---

<sup>12</sup> See TS Rebuttal c-workpaper "LRR Differential with MSP.xls."

**iii. Gaming Contentions**

BNSF claims that WFA/Basin's inclusion of rerouted traffic is impermissible because WFA/Basin included this traffic to "game" the Board's maximum rate setting process in violation of the Board's Major Issues decision. See, e.g., TS Reply Narr. at III-A-9. This contention is categorically wrong.

The "gaming" issue the Board addressed in Major Issues was carrier gaming of the Board's percent reduction method to allocate relief in SAC cases. Under percent reduction, each member of the SARR traffic group obtained a rate reduction equal to the percentage that SARR revenues exceeded SARR costs. For example, if the differential between revenues and costs was 20%, each member of the traffic group would obtain a 20% rate reduction. The Board found that the percent reduction method was subject to manipulation and gaming by rail carriers because the higher the defendant's starting tariff rate, the higher the resulting rate prescription. See Major Issues at 10.

The Board also noted that it was theoretically possible for a complainant shipper of low-rated traffic to game the percent reduction method by putting together a traffic group that contained significant volumes of high-rated traffic and if the SARR group revenues exceeded SARR costs, the low-rated traffic would obtain a reduction. Id. at 11. This concern was a theoretical one, rather than a practical one, because, as the

Board observed, the Board will not set a maximum rate below the 180% jurisdictional threshold. Id.

BNSF seizes upon the Board's gaming concerns in Major Issues and claims that WFA/Basin is engaging in the same form of shipper gaming the Board described in Major Issues. This claim is absurd and patently false. The WFA/Basin traffic is not low rated. The R/VC ratios on the LRR traffic approximate 212.6% in 2005. As shown in TS Rebuttal Table III-A-1, WFA/Basin's traffic is far and away the highest rated traffic carried by the revised LRR.

TS Rebuttal Table III-A-1			
<u>Group Member</u>		<u>Plant</u>	<u>Average R/VC Ratio</u>
1	WFA/Basin	LARAMIE RIVER	531 5%
2.	{ }	{ }	{ }
3.	{ }	{ }	{ }
4	{ }	{ }	{ }
5	{ }	{ }	{ }
6	{ }	{ }	{ }
7	{ }	{ }	{ }
8	{ }	{ }	{ }
9	{ }	{ }	{ }
10	{ }	{ }	{ }
11	{ }	{ }	{ }
12	{ }	{ }	{ }
13	{ }	{ }	{ }
14	{ }	{ }	{ }
15	{ }	{ }	{ }
16	{ }	{ }	{ }
17.	{ }	{ }	{ }
18	{ }	{ }	{ }
19	{ }	{ }	{ }
20	{ }	{ }	{ }
21	{ }	{ }	{ }
22	{ }	{ }	{ }
23	{ }	{ }	{ }
24	{ }	{ }	{ }
25.	Average		212 6%

WFA/Basin are not engaging in a SARR exercise of grouping low-rated issue traffic with high-rated non-issue traffic to obtain rate relief. What BNSF's gaming arguments really boil down to is the proposition that a shipper engages in "gaming" when it creates a SARR where high-rated traffic is grouped with other high-rated traffic in order to maximize SARR revenues and minimize costs. These contentions are contrary to core stand-alone cost principles set forth in the Coal Rate Guidelines and in the Board's decision in Major Issues.

Under the SAC test set forth in the Guidelines, a complainant shipper is entitled to rate relief only if the SARR revenues exceed SARR costs. Thus, any shipper seeking relief in a SAC case must first design a SARR where revenues exceed costs. The Board has made it clear that it is the complainant shipper's responsibility to model a SARR that maximizes SARR revenues and minimizes SARR costs.<sup>13</sup> In order for this goal to be achieved, the complainant shipper, not the defendant carrier, selects the SARR traffic group and the physical configuration of the SARR.<sup>14</sup> This exercise requires extensive computer modeling to develop the optimal differential between SARR revenues

---

<sup>13</sup> See, e.g., PPL, 6 S.T.B. at 760.

<sup>14</sup> See March '05 Decision at 2; WTU, 1 S.T.B. at 655 ("[t]o make a SAC presentation, a shipper designs a hypothetical new carrier . . . that is specifically tailored to serve an optimum traffic group"); Major Issues at 8 (same).

(as calculated under the Board's SAC revenue rules and precedents) and SARR costs (as calculated under the Board's SAC cost development rules and precedents).<sup>15</sup>

WFA/Basin developed rerouted interchange traffic revenues in accordance with longstanding agency precedent and calculated rerouted cross-over traffic revenues using the AIC procedures dictated by the Board. WFA/Basin's development of the revised SARR's revenues does not in any way "game" the Board's SAC standards. WFA/Basin are simply applying these standards in the manner called for under the Guidelines and Major Issues.

Moreover, the Board developed a method in Major Issues to address and correct both actual carrier gaming and theoretical shipper gaming. Id. at 11, 14. That method is MMM. Under MMM, the SARR traffic group is arrayed on an R/VC ratio basis. The maximum rate is set under MMM at a benchmark R/VC ratio equaling the average R/VC ratio the SARR needs to charge its traffic group members, such that rates on high-rated traffic are reduced to the benchmark and rates on lower rated traffic below the benchmark remained unchanged, and SARR revenues equal SAC. MMM solves the carrier gaming issue because the starting tariff rate does not determine the resulting maximum rate. Instead, the cost-based benchmark determines the maximum rate, and rates with R/VC ratios above the benchmark are reduced to the benchmark. MMM also addresses the theoretical shipper gaming issue since, under MMM, low-rated traffic

---

<sup>15</sup> See WPL, 5 S.T.B at 965 n.20; PMC, 4 S.T.B. at 721 n.51.

below the maximum R/VC ratio does not obtain rate reductions. WFA/Basin's TS evidence demonstrates that they are entitled to rate relief under MMM because the revised LRR's revenues exceed its costs and, under MMM, WFA/Basin's rates are reduced to the benchmark R/VC ratio. This is not the result of any "gaming" of MMM, this is how MMM is supposed to work.

Finally, the Board ruled in Major Issues that it would not consider making any changes in its new rules (including ATC and MMM) unless a party filed a rulemaking petition and demonstrated that the Board's new rules were "systematically biasing one party or another." Id. at 77 (emphasis in original). For example, with percent reduction, the railroad could always affect the final result in their favor by setting high initial rates. BNSF cannot demonstrate that WFA/Basin's actions in developing the highest revenue, lowest cost SARR reflect any systematic bias or "gaming" of the Board's standards because WFA/Basin are doing exactly what the Guidelines and Major Issues instruct them to do – modeling a feasible SARR that maximizes revenues and minimizes costs in order to maximize rate relief for the complainant shipper.

**iv. The Board's Standards For  
Inclusion of Rerouted Traffic**

BNSF claims that WFA/Basin's use of rerouted traffic is impermissible because WFA/Basin failed to justify their inclusion of this traffic under governing Board



precedent.<sup>16</sup> Again BNSF errs. As WFA/Basin explained in their TSO evidence, governing Board precedent permits a complainant shipper to include internally rerouted non-issue traffic in its SARR so long as the on-SARR routing is “reasonable and would meet the shippers’ needs.” See WFA/Basin TSO Narr. at I-10 (quoting ΔEP Texas at 10). WFA/Basin presented detailed evidence demonstrating that the revised LRR’s internally rerouted traffic met this standard. Specifically, WFA/Basin presented TSO evidence on opening demonstrating that the revised LRR would “meet the . . . needs” of the rerouted shippers by providing faster and more efficient transportation service for the volume of traffic included. WFA/Basin also demonstrated that the routings were “reasonable” because inclusion of this traffic was an integral part of their SARR operating plan to create an efficient SARR. Id. at III-C-24-31.

BNSF concedes that the revised LRR proposed by WFA/Basin meets the rerouted shipper’s needs, but maintains that WFA/Basin’s inclusion of internally rerouted traffic is not reasonable here because WFA/Basin have not pointed to any “alleged inefficiencies in BNSF’s network or operations.” TS Reply Narr. at III.A-8. That is simply not correct. The revised LRR is a hypothetical carrier that provides more efficient service for all the traffic it handles, and does so at a lower cost, than BNSF’s current network and operations. Moreover, the Board has never required that a complainant shipper identify specific incumbent carrier inefficiencies in modeling SARRs in general

---

<sup>16</sup> See TS Reply Narr. at III.A-8.

or as a prerequisite for including rerouted traffic in a SARR. Indeed, as the Board noted in Xcel, the Board's SAC test does not even require that a SARR use any of the incumbent's real-world rail lines, much less show that they are inefficiently operated. Id. at 22 ("Xcel could have designed a SARR that would not follow either of the current BNSF routes out of the PRB"). The purpose of the SAC test is to "define an efficient subsystem or alternative system" that serves the traffic group selected by the complainant. Guidelines, 1 I.C.C.2d at 544.<sup>17</sup>

BNSF claims that the Board's TMPA decision supports its specious argument. But that is not the case. In TMPA, the complainant shipper's SARR included various types of reroutes, including the reroutes of PRB coal traffic that BNSF transports in the real world between Campbell, WY and Northport, NE to a SARR routing south via Guernsey, WY to Northport, NE. In TMPA, the Board approved the use of these traffic reroutes because it found them to be "reasonable and would meet the shipper's transportation needs." Id., 6 S.T.B. at 594-95, 598. The revised LRR uses the identical form of reroute. The Board applied the same standard in Xcel when it approved the rerouting of the Jeffrey traffic via Guernsey, WY – again a reroute identical to the one

---

<sup>17</sup> The Board reaffirmed this basic principle in Major Issues at 7 ("[t]he SAC constraint protects a captive shipper from bearing costs of inefficiencies or from cross-subsidizing other traffic by paying more than the revenue needed to replicate rail service to a select subset of the carrier's traffic base"). BNSF's repeated references to the grouping standards set forth in simplified SAC procedures are inapposite because these standards do not apply in a large "Full-SAC" rate case. See Simplified Standards at 57.

included in the revised SARR. Id. at 20-21. Finally, in AEP Texas, the Board approved, under this same standard, the reverse rerouting of SARR traffic north via Donkey Creek, WY and Alliance, NE to Northport, NE. Id. at 9-11.

In these internal reroute cases, the Board also relied on the same form of proof that WFA/Basin submitted in its TSO evidence in applying the governing legal standards. In each case, the Board found that the SARR's rerouting of PRB traffic to Northport, NE met the shippers needs because the SARR was providing service equal to or better than the real-world BNSF (measured by service cycle times) and was reasonable because inclusion of the traffic was an integral part of the SARR's traffic group and operating plan.

## **2. Volumes (Historical and Projected)**

BNSF presents a "Base Case" revised LRR that utilizes the same traffic group, configuration and traffic volumes that WFA/Basin utilized in their TSO evidence. See TS Reply Narr. at III.A-14 ("BNSF does not dispute the volumes WFA/Basin calculate for their specified traffic group. As WFA/Basin indicate, the Board's September '07 Decision and its workpapers contain volumes for each of the shippers in WFA/Basin's current group."); TS Reply e-workpaper "STB LRR Traffic and Revenues\_ Modified SAC\_BNSF 7-14 ORIG ATC Den.xls" (showing BNSF Base Case traffic volumes).

WFA/Basin's TS Rebuttal evidence makes no changes in the revised LRR's traffic group or traffic volumes. WFA/Basin note that while BNSF's "Base Case" makes no changes in the traffic group, BNSF maintains that the revised LRR's revenues should be substantially reduced because, BNSF claims, WFA/Basin gamed MMM, impermissibly included rerouted traffic in the revised LRR, and impermissibly excluded other traffic. WFA/Basin address these erroneous contentions below.

**3. Revenues (Historical and Projected)**

TS Rebuttal Table III-A-2 compares WFA/Basin's opening calculation of the revised LRR's revenues (using CAPM) with BNSF's reply "Base Case" revised LRR revenues:

<b>TS Rebuttal Table III-A-2</b> <b><u>Revised LRR Revenue Calculations</u></b>			
<b><u>Period</u></b> <b>(Col 1)</b>	<b><u>WFA TSO</u></b> <b><u>Revenues</u></b> <b>(Col 2)</b>	<b><u>BNSF IS Reply</u></b> <b><u>Revenues</u></b> <b>(Col 3)</b>	<b><u>Difference</u></b> <b>(Col 2 - Col. 3)</b>
4Q04	\$58.3	\$42.0	\$16.3
2005	236.8	175.3	61.5
2006	250.6	185.1	65.5
2007	259.7	194.3	65.4
2008	262.3	196.7	65.6
2009	274.2	205.9	68.3
2010	277.0	208.2	68.8
2011	281.9	211.7	70.2
2012	287.9	216.4	71.5
2013	294.7	221.6	73.1
2014	299.8	225.5	74.3
2015	299.1	225.9	73.2
2016	307.4	231.6	75.8
2017	319.1	240.1	79.0
2018	330.4	248.4	82.0
2019	339.4	254.7	84.7
2020	348.8	261.6	87.2
2021	359.5	269.0	90.5
2022	368.2	275.5	92.7
2023	378.4	282.7	95.7
1Q-3Q2024	291.9	217.5	74.4
Totals	\$6,125.3	\$4,589.6	\$1,535.6

As discussed below, the difference in the parties' revenue calculations is due to BNSF's failure to follow governing Board standards in its calculation of the

revised LRR's divisions on interline and cross-over traffic. This failure results in a dramatic understatement in the LRR's revenues.

**a. Single Line**

The revised LRR has one single line movement, the issue traffic movement between the PRB and LRS. In their TSO evidence, WFA/Basin calculated the revenue for the issue traffic using the Board's electronic workpaper model adjusted to reflect the technical corrections approved by the Board in its February '08 Decision. BNSF "accepts" WFA/Basin's calculation of the revenues for the issue traffic. Sec TS Reply Narr. at III.A-14.<sup>18</sup>

**b./c. Divisions - Existing Interchanges;  
Divisions - Cross-Over Traffic**

Using 2005 as a representative year, WFA/Basin calculates the revised LRR's revenues as \$236.8 million. BNSF calculates the revised LRR's revenues in 2005 as \$175.3 million. The \$61.5 million difference is attributable to the parties' differing calculations of the LRR's revenues divisions.

The revised LRR contains one interchange movement. The revised LRR originates this traffic in the PRB and internally reroutes it over the LRR via Guernsey, WY to Northport, NE where it is interchanged with the UP for delivery to the Jeffrey

---

<sup>18</sup> While nominally accepting WFA/Basin's revenue calculations, BNSF proposes a length of haul adjustment in the MMM procedures that substantially reduces the issue traffic revenues for MMM purposes. The Board should not adopt this adjustment for reasons detailed in Part III-H below.

Energy Center. As called for under governing Board standards, WFA/Basin calculated the revised LRR's revenue divisions on the Jeffery traffic to equal BNSF's real-world revenue division for this traffic.<sup>19</sup> BNSF does not dispute that the Board has consistently calculated interchange divisions to equal the defendant carrier's actual revenues for the involved traffic, nor does BNSF dispute that WFA/Basin correctly applied these procedures in calculating the Jeffrey traffic divisions.

The revised LRR contains twenty cross-over traffic movements. The revised LRR originates this traffic in the PRB and interchanges it with the residual BNSF at Orin Jct., WY, Moba Jct., WY and Northport, NE. Included within the cross-over traffic are movements that the LRR internally reroutes for five of its customers. As called for under governing Board standards, WFA/Basin calculated the revised LRR divisions on all cross-over traffic using the Board's ATC method. BNSF does not dispute that WFA/Basin correctly calculated revenues on cross-over traffic using the ATC procedures that the Board adopted in Major Issues.

BNSF argues that WFA/Basin's revenue calculations are wrong because the Board's ATC and MMM procedures are "flaw[ed]," "bias[ed]," and permit "gaming," must be corrected by adopting several major changes.<sup>20</sup> BNSF asks the Board to change the current revenue calculations standards solely because BNSF does not like the results

---

<sup>19</sup> See, e.g., Xcel at 19-23.

<sup>20</sup> See, e.g., TS Reply Narr. at I-19, III.A-22.

they produce in this case when applied correctly. As the Board's counsel has astutely observed, BNSF "objects to any restraints on its pricing" and "any application of the SAC test that results in relief to captive shippers."<sup>21</sup> This is the expected reaction of a monopolist. The Board should not adopt BNSF's proposals for four reasons: because they constitute an impermissible attack on the rules the Board adopted in Major Issues; they violate the Board's directions not to "relitigate" issues not related to the revised SARR configuration and traffic group; and the adjustments do not correct any "flaws" in the Board's AIC and MMM procedures, they simply are a means to try to arbitrarily reduce the revised LRR's revenues.

**i. Collateral Challenges Will Not Be Considered**

The Board adopted ATC in Major Issues in order to "settle" the issue of how to set divisions on cross-over traffic.<sup>22</sup> The Board directed that ATC be applied in pending cases and rejected carrier arguments that they be permitted to present alternative cross-over traffic divisions methodologies in individual cases on grounds that "further debate" on this issue in individual cases "would defeat much of the purpose of this rulemaking." Id. at 76. As explained by the Board:

---

<sup>21</sup> Brief for Respondent STB at 36, BNSF Ry. v. STB, No. 05-1030 (D.C. Cir. filed July 21, 2005).

<sup>22</sup> Id. at 3. With a final rule, the Board expected predictably in evaluating the outcome of a complaint thus "facilitat[ing] rate case settlements and private negotiations." Id. at 12.



With respect to the appropriate methodology for allocating cross-over traffic, keeping open the issue for future cases leaves complainants in the same situation they are in now: having to defend the existing approach against attack from a defendant railroad. Railroads argue that a defendant must be permitted to show that the ATC is not resulting in an unbiased approach in a particular case. The Board does not expect that any approach could perfectly replicate the results of a SAC analysis without any cross-over traffic in all circumstances. But we believe that applying the simplifying device of cross-over traffic in conjunction with the ATC method for allocating cross-over traffic is a reasoned way to simplify the inquiry and will result in an unbiased result on average. If we permitted a carrier to argue against the ATC approach where the allocation favored the complainant, we would also need to permit a complainant to argue against the approach when it favored the railroad. If subsequent experience reveals that the approach is systematically biasing one party or another, the affected party may file a petition to institute a rulemaking proceeding (or we may do so on our own initiative) so that the broader affected public is again provided an opportunity to comment on the proposal before changes of industry-wide importance to our ratemaking methodology are implemented.

Id. at 77 (footnote omitted). BNSF's proposes wholesale changes in ATC to address so-called "flaws" in the procedures the Board adopted in Major Issues. Major Issues bars the Board from considering BNSF's adjustments in this case. BNSF's remedy is to file a rulemaking notice and prove that ATC is "systematically biasing one party or another."

Similarly, the Board directed the parties in its September '07 Decision not to “relitigate” issues decided in that decision that are not related to WFA/Basin’s changes in the LRR’s configuration and traffic group. Id. at 20. The Board applied ATC to set cross-over traffic divisions in its September '07 Decision. WFA/Basin followed the Board’s procedures in filing their TSO evidence. The Board’s September '07 Decision also precludes the Board from considering BNSF’s proposed changes to ATC because these issues are not related to the revised LRR’s configuration or traffic group.

**ii. Rerouted Traffic Revenue Adjustment**

BNSF proposes to address WFA/Basin’s rerouted traffic by making a revenue “adjustment” that reduces the revenue on all internally rerouted traffic to 88% of its costs, i.e., an R/VC ratio of 0.88.<sup>23</sup> BNSF claims that the 0.88 R/VC ratio is the average R/VC ratio for approximately 19 million tons of traffic that WFA/Basin improperly “excluded” from the revised LRR. Application of BNSF’s punitive adjustment reduces WFA/Basin’s calculation of the revised LRR’s revenues in 2005 (\$236.8 million) by \$45.9 million and by \$1,119.0 million over the 20 year DCF period.<sup>24</sup>

If the Board considers BNSF’s rerouted traffic adjustment, which it should not, the Board must reject it because it is based on two faulty premises: (1) that

---

<sup>23</sup> See TS Reply Narr. at III-A-27; see TS Reply e-workpaper “MMM Model Linked to III-H-1 FTI OA IC D.xls” and “reroute adj actual Guernsey.xls.”

<sup>24</sup> See TS Rebuttal e-workpaper “IMPACT BNSF REVENUE CHANGES\_EXHIBIT.xls.”

WFA/Basin impermissibly included rerouted traffic in the revised LRR, and (2) that WFA/Basin impermissibly excluded traffic from the revised LRR. As demonstrated above, WFA/Basin did not impermissibly include rerouted traffic in the revised LRR, nor did WFA/Basin impermissibly exclude any other traffic in the revised LRR traffic group.

Additionally, BNSF's penalty adjustment for rerouted traffic is not designed to correct any "systematic[] bias[]" in ATC. The adjustment is an arbitrary mechanism for reducing the revised LRR's revenue. The Board's SAC procedure permits the use of rerouted traffic and when the traffic is cross-over traffic, the Board's ATC procedure adopted in Major Issues is used to set the divisions.

Similarly, BNSF has not identified any systematic bias in the way the Board calculates SARR revenue for internally rerouted interchange traffic. The Board has consistently calculated those revenues to equal the incumbent's actual revenues. BNSF wants to change the procedure here solely to arbitrarily reduce the revised LRR's revenues.

### **iii. Density Adjustment**

WFA/Basin calculated revenue divisions for cross-over traffic using the ATC procedures set forth in the Board's September '07 Decision. These procedures require the calculation of on-SARR and off-SARR densities based on the SARR traffic. The Board ruled in its decision served on November 8, 2006 ("November '06 Decision") that these calculations must be made using on-SARR densities. See id. at 3 ("[o]n-SARR

traffic densities should not, however, include traffic that used those facilities in the base year that the complainant did not include in its traffic group"). The parties proceeded to follow this procedure in submitting ATC evidence in this case.

BNSF requests that the Board reconsider this decision and adopt a completely new procedure using the incumbent's densities, not the SARR's densities, in making the on-SARR density calculations. Adoption of BNSF's request would reduce the revised LRR's revenues by \$2.9 million in 2005 and \$74.0 million over the 20-year DCF model life.<sup>25</sup> BNSF's request that the Board review and change the ATC density calculations is barred by the Board's ruling in the September '07 Decision that the parties cannot litigate decided issues unrelated to the revised configuration of the LRR.

Moreover, even if the Board does decide to consider BNSF's requested density adjustment, the adjustment must be rejected. The purpose of the ATC test is to allocate revenues based upon the defendant "carrier's relative average costs of providing service over the two segments (the segment replicated by the SARR, and the residual facilities needed to serve the traffic, at times referred to as the off-SARR segment)." Major Issues at 25 (footnote omitted). The Board also added that "[t]he off-SARR segments would have other traffic flowing over those lines that would be expected to contribute to the investment costs." Id. at 24.

---

<sup>25</sup> See TS Rebuttal e-workpaper "IMPACT BNSF REVENUE CHANGES\_EXHIBIT.xls."

The Board's November '06 Decision applies these principles. The "segment replicated by a SARR" is based on the traffic and configuration selected by the complainant shipper. Id. at 3. The traffic density over this segment could be greater or less than the density of the lines the traffic moves over in the real world. ATC directs that the densities be calculated using the on-SARR densities based on the SARR traffic. Similarly, the cross-over traffic will interchange with the real-world residual incumbent. These lines will, as the Board found in Major Issues, carry more traffic than the cross-over traffic. Accordingly, ATC calls for the use of the real-world carrier's densities to make the off-SARR density calculation.

BNSF's position that the incumbent's densities should be used for the on-SARR portion of the through movement mistakenly ignores the Board's direction and the fact that a SARR is optimally designed to handle only the traffic in the SARR group. This traffic group can be more or less than the incumbent's traffic. The incumbent's fixed costs are spread over the actual density of the SARR which reflects an allocated portion of the incumbent's fixed costs that are consistent with the size of the stand-alone system being evaluated in maximum rate cases. BNSF's proposed new procedures also penalize the SARR for being efficient. When the SARR revenue share is based on the incumbent's greater density, the SARR is penalized through lower allocated revenues based on BNSF's approach.

BNSF claims that WFA/Basin are “manipulating on-SARR densities” to affect revenue allocation.<sup>26</sup> WFA/Basin are using the actual SARR densities and the actual residual incumbent densities in their calculation of revenue divisions pursuant to the Board’s ATC methodology. It is BNSF that is attempting to manipulate the methodology by introducing density data that does not correspond to the volume of SARR traffic selected by the complainant and the methodology mandated by the Board.

Finally, BNSF mistakenly maintains that the Board’s decision not to include interchange costs in making ATC variable cost calculations supports its density adjustment. BNSF’s analogy is flawed. The Board ruled that it should not include these costs because the defendant carrier would not incur these costs if the SARR provided “Full SARR” origin-to-destination service for all cross-over traffic movements. See Major Issues at 25 (the purpose of ATC is to “maintain, to the extent possible, the relationship between revenues and costs that would exist in a full SAC analysis”). In any “Full SARR” analysis, the SARR will be providing service not only to its traffic group, but to others and, as the Board found in Major Issues, and reaffirmed in its November '06 Decision, ATC divisions should be calculated using on-SARR densities that reflect the LRR traffic.

---

<sup>26</sup> TS Reply Narr. at III.A-20

#### **iv. ATC Application**

In its September '07 Decision, the Board ruled that language it had used to describe one technical computation in the ATC methodology was incorrect. Specifically, the Board ruled that the ATC cost ratios must be applied to the revenue contribution, if any, made by a SARR cross-over traffic movement, not to the movement's total revenue. The Board proceeded to deny BNSF's petition for reconsideration of this ruling. See February '08 Decision at 4-5. BNSF again asks the Board to overturn this ruling. The impact of this change would be to reduce the revised LRR's revenues by \$118 million in 2005 and \$324.1 million over the 20-year DCF model life.

BNSF's request is clearly barred by the Board's instruction not to relitigate settled issues. The Board carefully considered BNSF's objections to this ruling in its February '07 Decision, and rejected them. As stated by the Board:

[Application of ATC to revenue contribution] is reasonable and consistent with our objective in Major Issues. Traffic must cover its variable costs before it can be expected to make any contribution to joint and common costs. Therefore, the objective is how to allocate the *revenue contribution* (if any is available) between the facilities replicated by the SARR and those of the residual incumbent. While the language used in Major Issues to explain the basic ATC approach led the parties to allocate total revenue rather than total revenue contribution, we did not contemplate this situation, where such a procedure would result in other traffic on the SARR cross-subsidizing those cross-over movements with on-SARR

revenue allocations below variable costs. Such a result would plainly conflict with our express purpose to find a non-biased, cost-based method. See Major Issues at 32.

Id. at 14. WFA/Basin adhered to the Board's ruling, as it was required to do, in submitting its TS evidence and BNSF should be required to do the same.

**v. CAPM**

As requested by the Board, WFA/Basin submitted three DCF calculations, using three different cost of capital computations. In the two computations using CAPM, WFA/Basin also utilized CAPM to calculate the equity costs in the base year 2004 URCS used in its ATC calculations. This choice to utilize CAPM URCS for ATC is made for consistency and accuracy. BNSF urges the Board to utilize the single-stage DCF cost of equity in making the 2004 URCS calculations. If the Board substitutes the single-stage DCF cost of capital, the revised LRR's revenues will be reduced by \$0.8 million in 2005 and by a total of \$18.5 million over the 20-year DCF period.<sup>27</sup> WFA/Basin address CAPM issues in Part I above and in Part III.G below.

**d. Other – Revenue Results**

WFA/Basin make no changes in their TSO revised LRR revenue calculations. These annual calculations, using CAPM to calculate ATC divisions, are shown in Column 2 of TS Rebuttal Table III-A-2, above.

---

<sup>27</sup> See TS Rebuttal e-workpaper "IMPACT BNSF REVENUE CHANGES\_EXHIBITS.xls."



**III-B Stand-Alone  
Railroad System**

### **III. B. STAND-ALONE RAILROAD SYSTEM**

This section of WFA/Basin's TS Rebuttal evidence responds to BNSF's TS Reply evidence concerning the changes to the LRR's original configuration and facilities described in Part III-B of WFA/Basin's TSO evidence.

#### **1. Route and Mileage**

The only significant route change made by WFA/Basin in their TSO evidence was the extension of the LRR's route 92.0 miles from East Guernsey, WY to Northport, NE.<sup>1</sup> In its TS Reply Evidence BNSF objects in general to WFA/Basin's reconfiguration of the LRR as beyond the limited scope of the reopening authorized by the Board in its September '07 Decision and February '08 Decision. However, as demonstrated in Part I above, the reconfiguration was fully consistent with the Board's rationale in permitting WFA/Basin to file supplemental SAC evidence.

BNSF's specific comments on the revisions to the LRR system are addressed below.

#### **a. Route Miles**

In Part III-B-1 of their TSO evidence, WFA/Basin calculated the LRR's revised route miles at 301.45, as shown in TSO Table III-B-1 on page III-B-5 of their

---

<sup>1</sup> Due to the elimination of the interchanges with BNSF at Donkey Creek and Campbell and trackage used to move coal trains between the mines and these interchanges (including the former Donkey Creek Yard), the net increase is actually 83.53 route miles.

TSO Narrative. BNSF has accepted WFA/Basin's 301.45 route miles as the miles to be constructed by the LRR. However, it proposes to add 2.5 route miles at Northport in the form of trackage rights over UP to reach the current point of interchange between BNSF and UP for the coal trains originated by the LRR that UP terminates at the Jeffrey Energy Center in Kansas ("Jeffrey trains"). See TS Reply Narr. at III.B-1-2. The result is a total of 303.95 route miles, of which 301.45 are constructed by the LRR and 2.5 miles are UP-owned joint facility miles.

WFA/Basin accept the principle that the Jeffrey trains should be interchanged between the LRR and UP at the same point where they are interchanged between BNSF and UP in the real world. Accordingly, they accept BNSF's proposed 2.5-mile route extension in the form of trackage rights over UP at Northport.<sup>2</sup> The extension is shown on BNSF's TS Reply Exhibit III.B-1 and extends from UP Milepost 115.5 (the west end of the connecting track between BNSF's Angora Subdivision and UP's South Morrill Subdivision) to UP Milepost 112.9.<sup>3</sup>

---

<sup>2</sup> WFA/Basin note that UP apparently does not charge BNSF for operating over its tracks at Northport to effect the interchange of the Jeffrey trains, as BNSF has not contended that the LRR needs to compensate UP for the use of its trackage.

<sup>3</sup> WFA/Basin note that this distance actually appears to be 2.6 miles, rather than 2.5 miles as described in the TSO Reply Narrative, and in fact the distance incorporated into BNSF's RTC simulation (and WFA/Basin's rebuttal RTC simulation) is 2.6 miles. Since the 0.1-mile discrepancy does not affect road property investment costs, it does not need to be resolved in terms of calculating the LRR's total route miles. WFA/Basin therefore accept BNSF's stated distance for the UP trackage rights of 2.5 miles.

**b. Track Miles**

In their TSO filing, WFA/Basin calculated the LRR's revised track miles at 441.55. BNSF agrees with WFA/Basin's calculation with one minor addition. BNSF notes that WFA/Basin included a 2.0 mile passing siding (the Winters Siding) between Milepost 23.9 and Milepost 25.9 on the Valley Subdivision in their TSO simulation of the LRR's peak-period operations using the RTC Model, but failed to include this siding in their main track miles or in their LRR track diagrams (TSO Exhibit III-B-1). BNSF therefore added 2.0 miles to WFA/Basin's mainline track mile count, for a total of 406.61 main track miles and 443.55 total track miles. See TS Reply Narr. at III.B-3-5.

WFA/Basin concur that this siding was used in the RTC Model simulation included with their TSO Evidence but was inadvertently omitted from their track-mile count. Thus the main track and total track miles calculated in their TSO Evidence should each be increased by 2.0 miles, producing total constructed track miles of 443.55. The additional road property investment costs resulting from the addition of this siding, which is depicted in BNSF's TS Reply Exhibit III-B-2, are shown in Part III-F below.

**2. Yards**

In their TSO evidence, WFA/Basin reconfigured the LRR's yards. The yards at Donkey Creek and South Logan were eliminated, and the former Guernsey Yard was relocated to Orin and downsized to reflect the LRR's smaller traffic group and peak-

period train counts. BNSF has accepted these changes, including the track and other facilities layout for the Orin Yard. See TS Reply Narr. at III.B-4-5.

BNSF does raise issues concerning vehicular accessibility to and within Orin Yard due to the locations of various buildings and facilities and the alleged need for vehicular access between the yard tracks for DTL locomotive fueling. Id. at III.B.5-7. However, these are operating and construction issues rather than railroad configuration issues, and accordingly they are addressed in TS Rebuttal Parts III-C (SARR Operating Plan) and III-F (Road Property Investment) below. In summary, WFA/Basin concur that there is a need for vehicular access between the south and north sides of Orin Yard but only one south/north access route is needed rather than the two proposed by BNSF. There is no need for the construction of additional roadways between the yard relay tracks because there is no need for DTL fueling of any loaded trains at Orin Yard, and even if there were such a need, WFA/Basin have already provided roadways for use in conducting 1,500-mile car inspections.

### **3. Other**

BNSF has accepted WFA/Basin's revised signal and communications systems for the LRR, although it notes a discrepancy in the AAR signal units counts (see TS Reply Narr. at III.B-9). This issue is addressed in TS Rebuttal Parts III-D and III-F below. BNSF has also accepted WFA/Basin's basic parameters for the sizes and placements of turnouts, Failed-Equipment Detectors ("FEDs") and AEI scanners. Id.



### **III. C. OPERATING PLAN**

This section of WFA/Basin's TS Rebuttal evidence responds to BNSF's TS Reply evidence concerning the LRR's revised operating plan, as presented in Part III-C of WFA/Basin's TSO evidence.

#### **1. General Parameters**

As described in Part III-C-1 of WFA/Basin's TSO Narrative, the LRR's original operating plan, as accepted by the Board in its September '07 Decision, has been modified slightly to reflect the LRR's revised route, track configuration and traffic group. The ability of the revised system configuration and operating plan to accommodate the LRR's revised coal traffic group consistent with the requirements of its customers was confirmed by a simulation of the LRR's revised peak-period operations using the RTC Model, which was included with WFA/Basin's TSO evidence.

BNSF has accepted almost all of the elements of the revised LRR operating plan presented in WFA/Basin's TSO evidence, including the elements related to traffic flow, interchange points, traffic density, and train counts. BNSF's only substantive criticisms of the operating plan (other than its general objection to the inclusion of rerouted traffic) relate to the interchange arrangements with UP at Northport, the train dwell times allotted for the interchanges with UP and BNSF at Northport, and the number of train crew (T&E) personnel needed given the decision by WFA/Basin's operating experts, Paul Reistrup and Paul Smith, to use only straightaway crew assignments and to

base all crews at Orin Yard. BNSF also raises a few criticisms of the inputs to WFA/Basin's supplemental RTC simulation of the LRR's peak-period operations, and has conducted its own TSR RTC simulation which produces somewhat longer train cycle times. The longer cycle times affect the number of road locomotives and railcars needed to move the LRR's peak traffic volume, as well as the T&E employee count.

BNSF's specific criticisms of the LRR's revised operating plan and WFA/Basin's RTC simulation are addressed below. With respect to the RTC simulation presented in WFA/Basin's TSO evidence, WFA/Basin's experts have accepted some of BNSF's criticisms of that simulation and have incorporated them into a rebuttal RTC Model run. The results of the rebuttal RTC simulation, and the resulting operating statistics, are also presented in this section of WFA/Basin's TS Rebuttal evidence.

**a. Traffic Flow and Interchange Points**

BNSF accepts WFA/Basin's revised LRR traffic flows and interchange points as set forth in their TSO operating plan. See TS Reply Narr. at III.C-1. However, BNSF asserts that the operating plan does not include adequate arrangements and train dwell times for the interchanges with UP and BNSF at Northport. In particular, BNSF asserts that the 30 minutes of LRR train dwell time at Northport allotted by WFA/Basin are inadequate, and that WFA/Basin have not allowed enough time for the Jeffrey coal trains to move to and from the actual interchange point located on UP trackage.



**i. Interchange Procedures at Northport**

The LRR interchanges coal trains with both UP and BNSF at Northport. Trains interchanged with BNSF move either north over BNSF's Angora Subdivision to and beyond Alliance, NE, or south over the Angora Subdivision to and beyond Sterling, CO. Trains interchanged with UP move east over UP's South Morrill Subdivision to the *Jeffrey Energy Center in northeastern Kansas*.

BNSF asserts, erroneously, that the LRR's operating plan calls for all trains that are interchanged at Northport, regardless of whether they are interchanged with BNSF or UP, to be physically interchanged on the LRR interchange tracks located on the Valley Subdivision just west of the point where the main tracks diverge toward the two connections with BNSF's Angora Subdivision (the "BNSF Conn. North" and the "BNSF Conn. South" shown on page 9 of TSO Exhibit III-B-1).<sup>1</sup> This is correct with respect to the BNSF interchange trains, but incorrect with respect to the Jeffrey trains interchanged with UP. (WFA/Basin note that in the RTC Model all loaded Northport trains operate past the end of the LRR's tracks.)

WFA/Basin's operating plan explicitly provides that the Jeffrey trains are interchanged with UP on the UP interchange tracks, which are located east of BNSF's Angora Subdivision, and in fact the track in WFA/Basin's TSO RTC simulation extends past the point of connection with UP so that the Jeffrey trains can be interchanged on the

---

<sup>1</sup> See TS Reply Narr. at III.C-3-4.

UP interchange tracks. See TSO Narr. at III-B-10. The RTC simulation shows the LRR crews taking the loaded Jeffrey trains 2.0 miles east of the point where the LRR “crosses” BNSF’s Angora Subdivision, and picking up empty Jeffrey trains at the same point, in order to accomplish the interchange of these trains with UP.<sup>2</sup> In other words, WFA/Basin have not changed the location where the Jeffrey trains are interchanged between BNSF and UP in the real world; the only change is to substitute the LRR for BNSF as UP’s interchange partner for these trains.

BNSF also asserts that the distance between the connection with the Angora Subdivision and the UP interchange tracks is 2.6 miles, and that WFA Basin did not allot time for the LRR trains to operate these 2.6 miles to (and from) the point where they stop for interchange. TS Reply Narr. at III.C-11. In fact, in the TSO RTC simulation the LRR operated the Jeffrey trains over 2.0 miles of UP trackage east of the Angora Subdivision to reach the UP interchange. For purposes of their TS Rebuttal RTC simulation, WFA/Basin simply accepted BNSF’s configuration of and distance for the UP trackage in its RTC simulation (see TSR Rebuttal Exhibit III-C-1), and let the model determine how long it takes a train to travel the total distance of 2.6 miles to and from the interchange point rather than using the arbitrary 15 minutes of transit time added by BNSF.

---

<sup>2</sup> As noted above, the RTC simulation has been revised on rebuttal so that the LRR operates over 2.6 miles of UP tracks, rather than 2.0 miles, to reach the interchange location. Those 2.6 miles are now included in the LRR’s operating miles. A schematic of the LRR’s operating route at Northport from the rebuttal RTC simulation is reproduced as TS Rebuttal Exhibit III-C-1.

**ii. LRR Train Dwell Times at Northport**

WFA/Basin's operating experts allotted 30 minutes of dwell time for LRR trains at Northport, regardless of whether the trains are interchanged with BNSF or UP, except that they added 15 minutes to the dwell time for loaded trains destined to BNSF points south of Denver to add a fourth locomotive unit to these trains. This is consistent with the train dwell times at the Guernsey interchange point allotted in WFA/Basin's original operating plan and accepted by the Board in the September '07 Decision (*id.* at 17). BNSF asserts that substantially more LRR train dwell time needs to be allotted for most LRR trains at Northport because of the fact that two railroads operate numerous PRB coal trains through Northport over lines that intersect at grade. Specifically, BNSF proposes the following Northport dwell times for LRR trains:

Southbound (Sterling) loaded trains to BNSF	90 minutes
Northbound (Alliance) loaded trains to BNSF	60 minutes
All empty trains received from BNSF	30 minutes
Jeffrey loaded trains to UP	60 minutes
Jeffrey empty trains from UP	60 minutes

BNSF has failed to justify any of its increased Northport train dwell times. WFA/Basin therefore continue to use a dwell time of 30 minutes at the interchange point for all LRR trains except the BNSF southbound loaded trains which have a dwell time of 45 minutes.

**(1) Southbound Loaded Trains Interchanged with BNSF**

BNSF asserts that 90 minutes of LRR dwell time at Northport should be allotted for each southbound loaded coal train destined to and beyond Sterling, rather than

the 45 minutes allotted by WFA/Basin (30 minutes for the crew change and an additional 15 minutes to add a fourth locomotive at the rear of the train). BNSF posits several factors that allegedly support 90 minutes of dwell time for all of these trains. None of these factors is valid.

First, BNSF argues that because Northport is not a crew-change point for BNSF, crews based at Sterling would have to be taxied to Northport, a two-hour trip, and BNSF cannot be expected to keep Sterling-based crews waiting at Northport for LRR trains to show up there. TS Reply Narr. at III.C-5. However, BNSF interchanges the Jeffrey trains with UP at Northport, so Northport is in fact an established BNSF crew-change point. BNSF is silent as to where the crews handling the Jeffrey trains are based, but it is likely to be Alliance. There is no reason why Alliance-based crews could not also be used for the LRR/BNSF interchange trains, which would cut the taxi time considerably since Alliance is only 34 miles from Northport versus the 85-mile distance between Sterling and Northport. Even if Sterling-based crews must be used for these trains, many such crews overnight at Alliance (their away-from-home terminal) and there is no reason why they could not be taxied from Alliance to Northport to pick up a southbound train for the return trip to Sterling. WFA/Basin further note that neither Donkey Creek nor Orin Jct. nor Moba Jct. (in the case of the BNSF cross-over trains) is an established BNSF crew base, but BNSF did not object to allotting 30 minutes of dwell time at these interchange points for cross-over trains in the original round of evidence in this case.

Second, BNSF asserts that the interchange time for southbound loads “must provide for holding trains on the SARR’s tracks until BNSF can accommodate them on the main line heading south.” TS Reply Narr. at III.C-5. It is unclear what BNSF means by this cryptic statement, but presumably it is a reference to the fact that BNSF moves numerous coal trains over the Angora Subdivision through Northport.<sup>3</sup> However, the LRR does not have to account for real-world BNSF trains moving through Northport on the Angora Subdivision because the LRR does not cross the Angora Subdivision at grade. Rather, the LRR replicates 0.06 miles of the Angora Sub which is used by both southbound BNSF interchange trains and by the Jeffrey trains moving to/from the UP interchange.<sup>4</sup> Since the LRR replaces BNSF on the lines it replicates, it does not have to account for the residual incumbent’s remaining trains that use the replicated lines. Xcel I at 105; see also TMPA at 75 (a SARR that replicates the PRB Joint Line by constructing it and that is the only carrier that operates on the constructed line does not share the Joint Line with UP and does not have to account for UP trains using it).

Third, BNSF argues that the operating plan (and RTC simulation) must allow sufficient time for southbound trains interchanged between the LRR and BNSF to wait at Northport until the UP crossing is clear. TS Reply Narr. at III.C-6. As BNSF

---

<sup>3</sup> The Valley Subdivision, replicated by the LRR, has its easterly terminus at Northport where it connects with the Angora Subdivision.

<sup>4</sup> See TSO Exhibit III-B-1 (page 9) and the schematic of BNSF’s trackage at Northport in TSO e-workpaper “Team Manual Valley Sub.pdf.”

points out, southbound loaded coal trains interchanged with BNSF at Northport must cross UP's South Morrill Subdivision at grade a short distance south of the point where the LRR system ends on the Angora Subdivision.<sup>5</sup> BNSF Witness Mueller opines that because BNSF and the LRR operate essentially the same number of trains on essentially the same track configuration between Guernsey and Northport, the difference in average train speeds between the LRR and the real-world BNSF<sup>6</sup> must result from delays to BNSF trains waiting to cross the UP line. Id. This is sheer speculation, and is not supported by any empirical data concerning the actual delays that southbound BNSF coal trains moving from the Valley Subdivision to the Angora Subdivision incurred during the relevant (peak) period of the base year waiting for UP trains to clear the crossing. Nor has BNSF presented any evidence as to which railroad is the senior railroad at the crossing, which can affect which railroad's trains have priority of movement.

Fourth, BNSF asserts that the interchange time for southbound loaded trains would have to be longer than 30 minutes because BNSF crews would need additional time to add the fourth locomotive unit to the rear of the train before leaving the SARR

---

<sup>5</sup> See BNSF's TS Reply Exhibit III.B-1 which is a schematic showing the LRR, BNSF and UP trackage at Northport.

<sup>6</sup> BNSF's comparison of average train speeds is shown in TS Reply Exhibit III.C-1, but that exhibit is misleading. First, the BNSF average transit time is between { } and Northport, not Orin to Northport, so it involves { } more route miles than the LRR average transit time between Orin and Northport. Second, all loaded BNSF trains stop at Guernsey Yard for a crew change and, in most cases, topping off the locomotive fuel tanks. This adds transit time that the LRR does not incur since its trains run through Guernsey without stopping.

trackage at Northport, including activation of the distributed power (DP) communications link between the head-end and rear-end locomotives. TS Reply Narr. at III.C-6-7. This argument is plainly erroneous because under the LRR operating plan the inbound LRR crew places the fourth locomotive unit on the rear of the train, not the outbound BNSF crew. See TSO Narr. at III-C-32 and WFA/Basin's Opening Narr. at III-C-31-32. Moreover, the loaded train arriving at Northport already has one DP locomotive unit on the rear of the train, which already has a communications link with the head-end locomotive. When the fourth locomotive is added at the rear of the train, its throttle is automatically linked to the throttle of the existing DP locomotive to which it is attached, and thus to that locomotive's DP communications link with the lead locomotive. Thus no additional time is needed to establish another DP communications link. Finally, WFA/Basin's operating plan (and the rebuttal RTC simulation) allots an extra 15 minutes to add the fourth locomotive unit to southbound trains at Northport, for a total of 45 minutes of dwell time for those trains. As previously noted, the Board accepted this time allotment in the September '07 Decision.

*BNSF's final argument is that its proposed 90 minutes of Northport dwell time for southbound loaded trains is similar to the 85-minute average dwell time for crew changes at Sterling (TS Reply Narr. at III.C-7).* However, BNSF's real-world crew-change times at other locations are irrelevant to crew-change and train dwell times involving a SARR. The Board has previously accepted 30 minutes of dwell time for all

crew changes in this case, and it is inappropriate for BNSF to try to revisit this issue now on the basis of new evidence of its experience at an off-SARR location.

In short, BNSF has failed to justify its proposed 45-minute increase in the Northport dwell time allotted by WFA/Basin's operating plan for LRR trains interchanged to BNSF for southbound movement to and beyond Sterling.

**(2) Northbound Loaded Trains Interchanged with BNSF**

BNSF asserts that 60 minutes of train dwell time should be allotted at Northport for northbound loaded trains interchanged to BNSF for movement to and beyond Alliance. BNSF's reasoning is that Northport is not a crew change point for BNSF, BNSF would have to taxi crews from Alliance to Northport (a 30-minute trip), and "it is standard railroad operating procedure not to assemble and transport a crew to an interchange point until the train has arrived at the interchange point." BNSF TS Reply Narr. at III.C-8.

As noted earlier, Northport is in fact an established BNSF crew-change point for the Jeffrey trains, which BNSF interchanges with UP. Presumably BNSF taxis crews between Alliance and Northport for the Jeffrey trains, but in its discussion of the interchanges between the LRR and UP, BNSF does not reference any crew taxi time notwithstanding its statements that the LRR/UP interchange will occur the same way it occurs today in actual practice (*id.* at III.C-8-9).



WFA/Basin's operating experts disagree that it is "standard railroad operating procedure" not to call a crew for an outbound train at an interchange point until the inbound train has arrived, and BNSF has not cited any actual examples where this is the procedure. As the Board observed in TMPA, "BNSF has not explained why the [SARR] could not coordinate with the delivering carriers so that crews would at the interchange point when needed." Id. at 75.

More importantly, in this case BNSF (and the Board) have previously accepted 30 minutes of dwell time at interchange points for cross-over traffic where other functions such as the addition of a locomotive are not performed. BNSF argues that in the prior phase of this case the Board did not address the length of a reasonable dwell time because the interchange that corresponded to the Northport interchange was at Guernsey, where BNSF bases crews. See TS Reply Narr. at III.C-8. However, the same 30 minutes of dwell time was used (without objection from BNSF) at other interchange points for cross-over traffic that are not established BNSF crew bases, including Donkey Creek, Orin Jct. and Moba Jct. BNSF's attempt to revisit this issue in the case of *Northport* violates the Board's directive that "neither party will be allowed to use this reopening of the record to relitigate unrelated issues (such as how to account for non-SARR traffic at the PRB mines)." September '07 Decision at 20; see also March '08 Decision at 2.

For these reasons, 30 minutes of dwell time should continue to be used for northbound loaded coal trains interchanged to BNSF at Northport. WFA/Basin also note that BNSF does not challenge their allotment of 30 minutes of dwell time for empty interchange trains received from BNSF at Northport, regardless of whether they come from Alliance or Sterling.

**(3) Trains Interchanged with UP**

BNSF proposes a dwell time at Northport of 60 minutes for both loaded and empty Jeffrey coal trains interchanged with UP, rather than the 30 minutes allotted by WFA/Basin. TS Reply Narr. at III.C-9-10.<sup>7</sup> BNSF's principal justifications for the 30-minute increase are that "it will take time for the SARR to coordinate with BNSF the crossing of BNSF's main line on the Angora Sub" (id. at III.C-9) and that "the SARR needs time to coordinate with UP so that the Jeffrey trains will not interfere with UP's traffic when the Jeffrey trains use the UP main line to the west of the interchange tracks" (id.). Neither justification holds water.

With respect to the alleged "crossing" of the Angora Subdivision, WFA/Basin have previously shown that the LRR does not cross the Angora Sub but rather replicates a portion of it in order to reach the connecting track to the UP for

---

<sup>7</sup> BNSF incorrectly asserts that WFA/Basin did not provide any dwell time for empty Jeffrey trains at Northport. In fact, the TSO operating plan and RTC simulation both provided for 30 minutes of dwell time at the interchange point in both the loaded and the empty direction.

interchange purposes. As the LRR is a replacement for BNSF at this location, it does not need to account for residual BNSF trains that operate through Northport on the Angora Sub.

As for the need to account for delays resulting from having to use a short segment of one of UP's two main tracks to reach the interchange tracks, BNSF's support for this consists of general references to its Witness Mueller's "years of operating experience in the PRB" and "recent conversations" between Mr. Mueller and BNSF's Alliance Terminal Superintendent to the effect that loaded and empty Jeffrey trains currently sit on the interchange tracks for substantial periods and that there is a need to stage Jeffrey trains so that an interchange track is clear when they arrive. Id. at III.C-9-10. This kind of anecdotal evidence does not justify the arbitrary addition of 30 minutes of dwell time at the Northport interchange for the Jeffrey coal trains. BNSF presented no empirical evidence of the extent to which the Jeffrey trains actually sit on the interchange tracks, or why,<sup>8</sup> or the extent to which the Jeffrey trains have to be staged while on BNSF to avoid interfering with other UP traffic using its mainline through Northport. In the absence of such evidence, the Board should accept the 30 minutes of dwell time allotted

---

<sup>8</sup> BNSF taxis crews from Alliance to Northport for the empty Jeffrey trains, which could add considerably to the real-world dwell time for these trains depending on when BNSF calls the crews. Northport is an away-from-home terminal for the Orin-based LRR crews that pick up the empty Jeffrey trains, so the LRR crews incur no taxi time.

by WFA/Basin at Northport for purposes of their RTC simulation of the Jeffrey trains, as well as the LRR running times for these trains produced by the rebuttal RTC simulation.

**b. Track and Yard Facilities**

BNSF has accepted the facilities that the LRR uses for purposes of WFA/Basin's RTC simulation, as described in WFA/Basin's TSO evidence. TS Reply Narr. at III.C-11. BNSF points out that WFA did not include in their TSO Exhibit III-B-1 or in their road property investment costs the two-mile siding on the Valley Subdivision that was included in their RTC simulation. Id. As noted in Part III-B-1-b above, WFA/Basin agree that this siding is part of the LRR system and they have added it for purposes of their TS Rebuttal configuration and road property investment costs. They have also added an additional 0.6 miles of UP trackage at Northport, over which the LRR operates to interchange the Jeffrey trains with UP, to the facilities used in their rebuttal RTC simulation.

**c. Trains and Equipment**

BNSF has accepted WFA/Basin's train sizes, locomotive consists, equipment type (including railcars), and ownership, as well as the general methodology used by WFA/Basin to calculate the numbers of locomotives and railcars the LRR needs. TS Reply Narr. at III.C-11. BNSF also concurs with WFA/Basin that the LRR needs a total of eight SD40-2 helper/switch/work train locomotives. Id. at III.C-12. However, BNSF asserts that WFA/Basin have understated the number of SD70MAC road

locomotives and railcars that the LRR needs because their train transit times are too short due to issues relating to their RTC simulation. Based on its own TS Reply RTC simulation, BNSF calculates that in the peak year the LRR needs a total of 81 road locomotives, rather than the 73 road locomotives calculated by WFA/Basin, and a total of 627 railcars rather than the 557 calculated by WFA Basin. Id. at III.C-12-13.<sup>9</sup>

WFA/Basin agree that the number of road locomotives and railcars needed by the LRR to handle its peak-year traffic is largely a function of the cycle times produced by the RTC simulation. As described in TS Rebuttal Part III-C-2 below, WFA/Basin have conducted a revised RTC simulation of the LRR's peak-period operations using corrected inputs based on some of BNSF's criticisms of the inputs used in the TSO simulation. The rebuttal RTC simulation produces slightly longer cycle times for some LRR trains and slightly shorter cycle times for other LRR trains, depending on the O/D route involved. Use of the rebuttal cycle times, with the Board-authorized spare margins and peaking requirements, changes the LRR's road locomotive and car requirements in the peak year. The changes are shown in TS Rebuttal Table III-C-1 below.

---

<sup>9</sup> BNSF's text and tables switch back and forth between base year numbers and peak year numbers. Also, BNSF's Table III.C-1 references a WFA/Basin TSO peak road locomotive count of 67. That was actually WFA/Basin's base year number; their TSO peak year number was 73 road locomotives. For consistency of presentation, WFA/Basin discuss only the peak-year numbers in the text above.

<b>TS Rebuttal Table III-C-1</b> <b>LRR Peak Year Locomotive and Car Requirements</b>				
<b><u>Item</u></b>	<b><u>WFA/Basin TSO</u></b>	<b><u>BNSF Reply</u></b>	<b><u>WFA/Basin TS Rebuttal</u></b>	<b><u>BNSF Overstatement</u></b>
<b>Locomotives</b>				
SD 70MAC	73	81	76	5
SD 40-2	8	8	8	0
<b>Total Locomotives</b>	<b>81</b>	<b>89</b>	<b>84</b>	<b>5</b>
<b>Railcars</b>				
Gondolas - Aluminum	170	185	175	10
Gondolas - Steel	238	258	239	19
Hoppers - Steel	149	184	158	26
<b>Total Railcars</b>	<b>557</b>	<b>627</b>	<b>572</b>	<b>55</b>

## **2. Cycle Times and Capacity**

Although BNSF has recalculated the LRR's peak-period train cycle times based on its "corrected" RTC simulation of the LRR's operations, BNSF has accepted the LRR's capacity to handle its peak traffic volume in terms of mainline track and yards. TS Reply Narr. at III.C-13. In this regard, BNSF has also accepted the LRR's revised peak-year coal traffic volume, revised peak-period train list,<sup>10</sup> and revised peak week and RTC simulation period as calculated by WFA/Basin in their TSO evidence. Id. BNSF has also

---

<sup>10</sup> At p. III-C-15 of their TSO Narrative, WFA provided an incorrect exhibit reference for the revised RTC train list. The reference should have been to TSO e-workpaper "PEAK\_PERIOD\_TRAINS\_EXHIBIT\_033108.xls."

accepted the revised LRR crew districts, although, as discussed below, it disagrees with WFA/Basin's train crew (T&E) personnel counts because of issues related to the travel (taxi) time for some crews from their home terminal at Orin to the mines.

BNSF raises a number of criticisms of the operating and other inputs WFA/Basin made to the RTC Model for purposes of their TSO simulation of the LRR's peak-period operations. These criticisms are discussed below.

**a. Inputs to the RTC Model**

While BNSF has accepted most of the elements of WFA/Basin's operating plan that were used as inputs to the RTC Model, it disputes some operating inputs as well as a few physical and coding inputs. Each of the disputed inputs is discussed below.

**i. Configuration (Track) Inputs**

The only track configuration input that BNSF changed was to include 2.6 route miles of UP trackage east of the Angora Subdivision at Northport to reach the point of interchange of the Jeffrey trains between the LRR and UP, as well as the two UP interchange tracks.<sup>11</sup> WFA/Basin's experts have accepted BNSF's RTC track layout at Northport for the UP interchange for purposes of simulating the operation of the Jeffrey trains to and from the UP interchange point.

---

<sup>11</sup> As noted in Part III-B-1-a above, WFA included the Winters siding between Mileposts 23.9 and 25.9 on the Valley Subdivision in the TSO RTC simulation, even though it was not shown in the system track diagrams (TSO Exhibit III-B-1). Thus there is no RTC issue concerning this siding.

**ii. Random Outages**

BNSF accepts the number, type and locations for the random outages used as inputs in WFA/Basin's TSO RTC simulation, with two exceptions. First, BNSF points out that WFA/Basin incorrectly assigned two random outages for the Valley Subdivision (which extends from East Guernsey to Northport) to locations (Mileposts 90.5 and 92.4) that are actually on the Canyon Subdivision, which was part of the original RTC simulation. TS Reply Narr. at III.C-14. WFA/Basin's experts acknowledge this mistake, which resulted from assigning the wrong milepost as the dividing point between the Canyon and Valley Subdivisions (according to BNSF's track charts, the Valley Sub ends and the Guernsey Sub begins at Milepost 90.4). BNSF randomly re-assigned these two outages to Valley Sub Mileposts 18.4 and 89.4. Id. WFA/Basin's experts concur that BNSF used the appropriate randomization process to reassign the two outages to these locations, so they accept the new locations and have incorporated them into the rebuttal RTC simulation.

Second, BNSF notes that WFA/Basin incorrectly entered a single milepost location for each random outage into the RTC Model, whereas the Model requires that the beginning and ending milepost be different to give effect to the outage. Id. WFA/Basin's experts acknowledge this oversight, and have corrected it by entering BNSF's proposed beginning and ending mileposts for each random outage into the Model for purposes of their rebuttal RTC simulation.



**iii. Handling of Loaded Trains in Orin Yard**

At page III.C-18 of its TS Reply Narrative, BNSF states that it accepts WFA/Basin's RTC modeling concerning locomotive fueling/servicing procedures and dwell time. Elsewhere, however, BNSF notes that in the TSO simulation the loaded trains requiring refueling at Orin Yard were not directed to the two tracks that were equipped with fixed fueling facilities, but rather were allowed to enter any track in the yard. Id. at III.B-8.<sup>12</sup>

This was not WFA/Basin's intent, as the fixed fueling facilities were designed to be used only to fuel the locomotives on those loaded trains moving through Orin that required refueling by the LRR, i.e., the trains moving to the BNSF "south" interchange at Northport and destined for points beyond Sterling, CO. See TSO Narr. at III-F-31 and WFA/Basin's Opening Narr. at III-C-64. Indeed, as BNSF has pointed out, if these trains were allowed to use any track in Orin Yard most of them would have to be fueled by DIL service, with tanker trucks operating between various yard tracks to reach the locomotives. This would render the fixed fueling facilities unnecessary.

Consistent with their original intent, WFA/Basin's experts re-programmed the RTC Model for purposes of their rebuttal simulation so that all loaded trains moving to BNSF points south of Northport were instructed to use the two main tracks through the

---

<sup>12</sup> The fixed fueling facilities are shown in the schematic diagram of Orin Yard as "Mainline Fueling Racks." See TSO Exhibit III-B-1, page 5.

yard which are covered by the permanent fueling facilities. The Model then directed other trains onto available yard tracks if the main tracks were occupied by loaded trains that needed to be re-fueled.

The incorporation of this change into the rebuttal RTC simulation does not materially affect overall train cycle times. It does mean that DTL fueling of loaded trains at Orin Yard is unnecessary. Again, this is consistent with the original intent of WFA/Basin's operating witnesses as set forth in the Opening and TSO Narratives.

**iv. Crew Districts as they Affect Loaded  
Train Dwell Time at Orin Yard**

BNSF accepts WFA's crew districts, but it asserts that in developing its Train and Engine ("T&E") personnel counts WFA/Basin failed to include appropriate travel (taxi) time for the Orin-based crews that have to travel to the mines to move loaded coal trains back to or through Orin after they report for duty. The result is that many loaded trains have to be re-crewed (that is, the crews "outlaw" under the federal Hours of Service law) before they reach Orin or Moba Jct. TS Reply Narr. at III.C-15-17.

WFA/Basin's operating experts agree that additional travel time for crews from their Orin crew base to the Caballo Rojo Mine and the mines on the Campbell Subdivision may be appropriate. To minimize disputes between the parties, WFA/Basin's experts have accepted the travel times allotted by BNSF (3 hours and 57 minutes for crews going to the mines on the Campbell Subdivision and 3 hours and 17 minutes for

crews going to Caballo Rojo Mine<sup>13</sup>). As a result, a number of crews cannot complete their runs from these mines within the 11 hours of combined highway and train transit times that WFA/Basin originally allotted. Accordingly, WFA/Basin's experts have revised their T&E personnel count to reflect the need for re-crewing of those trains whose crews have a combined highway and train transit time (taken from the rebuttal RTC simulation) that exceeds 11 hours. This is primarily an issue related to the LRR's operating statistics discussed in Part III-D-3-a below, but the bottom line is that WFA/Basin accepts BNSF's proposed addition of 13 T&E personnel to their original 133-person count.

For purposes of the RTC simulation, BNSF proposes to add 30 minutes of dwell time at Orin yard for a crew change for certain loaded trains moving to Moba Jct. to account for the need for re-crewing. TS Reply Narr. at III.C-16. However, BNSF's treatment of the re-crewing issue is inconsistent depending on the O/D pairs involved. As explained below, consistent treatment eliminates the need for a crew change on any loaded Moba Jct. trains.

BNSF treats loaded trains that are scheduled for a crew change at Orin (i.e., trains moving to Northport and trains interchanged to BNSF at Orin Jct.) differently than it treats loaded trains moving to Moba Jct., which are not scheduled for a crew change at Orin. With respect to the former, BNSF assumes that all loaded trains originating at

---

<sup>13</sup> See TS Reply Exhibits III.C-2 and III.C-3.

mines on the Campbell Sub will require a rescue crew on the road – that is, before the train arrives at Orin (id. at III.C-17). However, BNSF does not allot any time for re-crewing these trains in the RTC Model, even though some crews would outlaw short of Orin and thus would need to be relieved by a fresh crew to bring the train into Orin.

With respect to loaded trains moving to Moba Jct., BNSF states that all trains destined for I.RS have to be re-crewed because in every case, the crew will be on duty for more than 12 hours when both taxi and train transit time are taken into consideration. TS Reply Narr. at III.C-15. Depending on the mine origin, some of these trains have to be re-crewed short of Orin, and some have to be re-crewed between Orin and Moba Jct. Id. BNSF assumes that all of these trains will be rescued “on the road” and that the rescue crew will take the train all the way to Moba regardless of where the rescue occurs. Id. at III.C-16. BNSF further assumes a 30-minute dwell time at Orin for a crew change for all of these trains – even though some trains have to be re-crewed before they get to Orin. With respect to these trains, BNSF states that “[as] a surrogate to the delay time on the road, BNSF has assigned the 30-minute crew change time to these trains at Orin Yard.” Id.

Not only does BNSF treat the Moba Jct. trains whose crews outlaw north of Orin differently than it treats the other loaded trains that outlaw short of Orin (30 minutes of additional RTC time for the former, no additional RTC time for the latter), but BNSF

does not actually treat the Moba Jct. trains in the RTC Model and in its restatement of LRR operating costs the way it says it does in its TS Reply Narrative.

Exhibit III-C-2 attached hereto summarizes BNSF's treatment of the loaded Moba Jct. trains in its TS Reply III.C Narrative text, in its base TS Reply RTC simulation, and in its TS Reply operating costs. This exhibit shows that BNSF is all over the map in how it treats the loaded Moba Jct. trains. For example, in the TS Reply Narrative text BNSF says it adds 30 minutes of dwell time at Orin for all LRS trains. In fact, it did not add 30 minutes of dwell time at Orin for any LRS trains in its RTC simulation, but instead added 30 minutes of dwell time at Orin for all of the loaded Platte River/Rawhide trains (which also move to Moba Jct.) even though none of these trains exceeded 11 hours of total on-duty crew time for their entire run. Exhibit III-C-2 also shows a disconnect between whether a rescue crew was added in BNSF's operating costs and whether 30 minutes of crew-change time was added at Orin in BNSF's RTC simulation.

Given BNSF's inconsistent treatment of this issue in the various parts of its TS Reply Evidence, WFA/Basin's experts have concluded that the loaded Moba Jct. trains requiring a re-crew should be treated the same way the loaded trains scheduled for a crew change at Orin that require a re-crew are treated by BNSF in the RTC simulation. Consistent with BNSF's RTC treatment of the latter trains, WFA/Basin's experts have not added 30 minutes for an Orin crew change for any loaded Moba Jct. train in their rebuttal RTC simulation. (As noted earlier, they have, however, provided for additional T&E

crew personnel to the extent warranted by the combined highway time and the train transit time from the rebuttal RTC simulation for each loaded train.)

**v. Train Dwell Times at Northport**

BNSF proposes to incorporate changes to the way LRR trains are handled at Northport in the RTC Model, including modification of the track to reflect the movement of trains to and from the UP interchange tracks, differentiation between trains interchanged with BNSF moving south toward Sterling and north toward Alliance, and increased Northport dwell times for all loaded trains and for the empty Jeffrey trains. See TS Reply Narr. at III.C-18-19. As described in Part III-B-1-a above, WFA/Basin's experts concur with the modification of the track in the RTC Model to reflect the operation to and from the UP interchange tracks, but disagree that BNSF's other changes are necessary. Therefore, in their rebuttal RTC simulation they continue to allot 30 minutes of dwell time at Northport for all trains except loaded trains moving south via BNSF; for those trains 45 minutes of dwell time are allotted to accommodate the addition of a fourth locomotive unit at the rear of the train.

**vi. Coding Issues**

BNSF refers to various minor coding errors in WFA/Basin's TSO RTC simulation, which it corrects for purposes of its TS Reply simulation. TS Reply Narr. at III.C-19-20. These corrections include inputting the proper elevation for the north end of Orin Yard; correcting the coding for eleven links and/or nodes in the Model which

produced error messages; and correcting the speed limits for 19 #20 turnouts on the Valley Subdivision. Id. WFA/Basin's experts concur with these corrections and have made all of them for purposes of the rebuttal RTC simulation.

**b. Results of the Rebuttal RTC Simulation**

WFA/Basin's experts re-ran the RTC Model with all of the changes described above. The model ran to completion without any additional configuration changes. The rebuttal RTC simulation is included in the electronic workpapers accompanying this filing as TS Rebuttal workpaper folder "III-B\RTC."

The rebuttal RTC simulation has produced average train cycle times for the LRR's peak-period trains that are slightly different from those presented in the TSO simulation. All of the LRR's average peak-period cycle times produced by the rebuttal simulation are lower than the actual average BNSF cycle times for the base year for all routes over which coal traffic moves in the peak period. This includes cycle times for the rerouted trains that move via Northport.

The comparative BNSF and LRR train cycle times are shown in TS Rebuttal Table III-C-2 below. This table is similar to Table III-C-5 in WFA/Basin's TSO Narrative. The TS Rebuttal cycle times shown in Table III-C-2 are, in most cases, lower than the cycle times for the same movements produced by BNSF's RTC simulation, as shown in Table III.C-3 on page III.C-21 of the TS Reply Narrative.

**TS Rebuttal Table III-C-2  
BNSF and LRR Train Cycle Times (Hours)**

<b>Movement</b>	<b>BNSF Avg.<sup>1'</sup> (Base Year)</b>	<b>LRR TSO Avg. (Peak)</b>	<b>LRR TS Reb. Avg. (Peak)</b>
1. Northport to Eagle Butte Mine and return (all)	{ }	35.1	36.1 <sup>2'</sup>
2. Northport to Buckskin Mine and return	{ }	37.5	36.3
3. Northport to Rawhide Mine and return	{ }	34.3	36.1
4. Northport to Caballo Mine and return	{ }	29.9	36.1
5. Northport to Cordero Mine and return	{ }	31.5	30.4
6. Northport to Black Thunder Mine and return	{ }	30.7	32.0
7. Northport to N. Antelope/Rochelle Mine and return	{ }	27.8	28.4
8. Moba Jct. to Eagle Butte Mine and return	{ }	52.8	52.3
9. Moba Jct. to Dry Fork Mine and return	{ }	46.8	47.3
10. Moba Jct. to Caballo Rojo Mine and return	{ }	46.5	44.3
11. Moba Jct. to Jacobs Ranch Mine and return	{ }	47.0	43.6
12. Moba Jct. to Antelope Mine and return	{ }	16.1	16.1
13. Orin Jct. to Clovis Point Mine and return	{ }	19.4	20.3
14. Orin Jct. to Cordero Mine and return	{ }	18.1	20.0
15. Orin Jct. to Jacobs Ranch Mine and return	{ }	17.1	15.0
16. Orin Jct. to Antelope Mine and return	{ }	14.8	14.1

<sup>1'</sup> BNSF movements from Northport are via Guernsey and Orin.

<sup>2'</sup> The TS Rebuttal Northport-Eagle Butte-Northport cycle time shown in Line 1 is an average for all trains. The average cycle time for trains interchanged with BNSF is 35.3 hours and the average cycle time for trains interchanged with UP (all of which move to and from Eagle Butte Mine) is 36.7 hours.



It should be noted that the cycle times for the Northport interchange trains shown in Table III-C-2 reflect average dwell times for all UP and BNSF interchange trains, including trains that move from/to the south and from/to the north on BNSF. There are minor differences between individual trains, particularly since 30 minutes of Northport dwell time are used for BNSF northbound loaded trains and 45 minutes of Northport dwell time are used for BNSF southbound loaded trains.

Also, footnote 2 of the table shows the average cycle times for BNSF interchange trains and the UP (Jeffrey) interchange trains moving between Northport and Eagle Butte Mine and return. The different cycle times shown in the footnote reflect the fact that the UP trains are interchanged at a different location than the BNSF trains.

### **3. Rerouted Traffic**

Although BNSF generally disputes the inclusion of any rerouted traffic in the LRR's traffic group as exceeding the limited scope of the reopening authorized by the Board, for purposes of its TS Reply Evidence BNSF has accepted all aspects of WFA/Basin's TSO operating plan with respect to that traffic except for the handling and dwell times for the trains containing rerouted traffic (including the Jeffrey trains) at Northport. See TS Reply Narr. at III.C-21-22. The LRR's interchange operations and dwell times at Northport (which include interchange operations and dwell times for rerouted traffic) are discussed above in Part III-C-1-a of this TS Rebuttal Narrative.

BNSF's average base year cycle times between Northport and the mines for the rerouted trains, by movement, are shown in Table III-C-8 on page III-C-30 of WFA/Basin's TSO Narrative. These cycle times are higher in each case than BNSF's base year cycle times for non-rerouted trains moving from/to Northport via Guernsey and Orin, as shown in TS Rebuttal Table III-C-2. Thus the LRR continues to move the rerouted trains at cycle times lower than BNSF's real-world cycle times.

**4. Other**

BNSF has accepted WFA/Basin's TSO operating plan with respects to car inspections, train control, and communications (although it states that it made some modifications to WFA/Basin's signal and communications components to conform to WFA/Basin's RTC Model simulation). See TS Reply Narr. at III.C-23. However, BNSF criticizes two other elements of WFA/Basin's operating plan, relating to vehicular access to both sides of Orin Yard and the procedure for fueling of locomotives on certain loaded coal trains at Orin yard. Each of these issues is discussed below.

**a. Vehicular Access to Both Sides of Orin Yard**

BNSF asserts that vehicular access to both sides of Orin Yard is needed because public highway access and the LRR's headquarters building are located on the south side of the yard but the locomotive servicing facilities, locomotive shop and car shop are located on the north side of the yard. BNSF proposes to provide grade-separated

vehicular access from the south side of the yard to the north side at both ends of the yard.

See TS Reply Narr. at III.B-5-7.

WFA/Basin's operating and engineering experts agree that vehicular access to the north side of Orin Yard is necessary, and that it was not adequately provided for in the TSO operating plan. However, they disagree that access is needed at two locations. They believe the best location for vehicular access is at the (geographic) west end of Orin Yard, which is closest to the locomotive fueling/servicing facilities and the locomotive shop.<sup>14</sup> Accordingly, they have accepted BNSF's proposal to construct a two-lane access road, including a railroad bridge over the road, at Orin Subdivision Milepost 126.29.<sup>15</sup> They do not believe that vehicular access across the yard tracks is needed at or near the (geographic) east end of the yard.

In the experience of WFA/Basin's operating experts, it is not uncommon for vehicular access to both sides of a rail yard of the size of the LRR's Orin Yard to be provided at a single location – particularly if the access is grade-separated from the tracks so that there is no need for vehicles to stop to wait for passing or standing trains. Here, the access at the geographic west end of Orin Yard is in the form of a grade-separated, two-lane road. This type of access ensures that vehicles can travel from one side of the

---

<sup>14</sup> A schematic diagram of the Orin Yard track and facilities layout is provided on page 5 of TSO Exhibit III-B-1. The geographic north side of the yard is toward the bottom of the page.

<sup>15</sup> WFA/Basin's engineering experts have accepted BNS's specifications and construction costs for this access road. See Subpart I of TS Rebuttal Part III-F below.

yard to the other without interference from railroad operations, and means that there is no need for back-up access at another location (as there would be if the access road crossed the tracks at grade).

The only facility near the (geographic) east end of Orin Yard that needs to be reached by highway is the car shop. However, shop personnel and supplier travel to the car shop is not time-sensitive, and there is no reason why vehicles moving to and from the car shop area cannot use the two-lane road underpass at the west end of the yard.<sup>16</sup> That road extends to the locomotive shop, and WFA/Basin's engineering experts have provided for vehicular access between the area of the locomotive shop and the car shop by means of a gravel roadway between the two facilities. At most, it will take a vehicle two or three extra minutes to reach the car shop using the west-end underpass compared with providing additional, redundant access near the east end of the yard. This clearly does not justify the cost of constructing a second grade-separated access road at a location that would require a 508-foot-long, 14' x 14' box culvert to cross 14 tracks, as BNSF proposes.

**b. Locomotive Fueling at Orin Yard**

With respect to loaded trains that need to have their locomotives refueled at Orin Yard, BNSF asserts that based on WFA/Basin's TSO RTC routing of trains into

---

<sup>16</sup> Having two travel lanes means that vehicles traveling in one direction do not have to stop and wait for vehicles moving in the opposite direction while traversing the underpass itself.

Orin Yard, the refueling can be performed on any track in the yard whereas WFA/Basin have provided for fueling facilities covering only two tracks. BNSF thus states that it has “corrected WFA/Basin’s operating plan to add fuel trucks that permit refueling of trains on the other tracks.” TS Reply Narr. at III.C-22.

As explained in Part III-C-2-a-iii above, the TSO RTC simulation should have directed the loaded trains that require refueling at Orin onto one of the two mainline tracks that are covered by the permanent fueling facilities. WFA/Basin’s experts have corrected this in the rebuttal RTC simulation. This means that refueling of loaded trains occurs only on these two tracks, and there is no need for DTL fueling of any of these trains by tanker trucks.

III-D Operating Expenses

### **III. D. OPERATING EXPENSES**

In this section of their TS Rebuttal evidence WFA/Basin respond to BNSF's TS Reply criticisms of their TSO evidence concerning the LRR's annual operating expenses. BNSF advocates an increase in the LRR's base-year operating expenses of about \$7.3 million compared with the operating expenses developed by WFA/Basin. About \$6.3 million of the \$7.3 million total difference between the parties is driven by three general categories of expense: locomotive ownership, maintenance and operations (\$2.2 million); train and engine personnel (\$1.6 million); and maintenance-of-way (\$2.5 million). There are also minor differences in costs for railcars, non-train operating personnel, and materials and supplies.

As shown below, WFA/Basin have accepted some of BNSF's proposed increases in the LRR's annual operating expenses, and rejected others. The net result is to narrow the gap between BNSF's base year operating expenses and WFA/Basin's base year operating expenses from \$7.3 million to approximately \$2.4 million. TS Rebuttal Table III-D-1 below provides a comparison of the LRR's base year operating expenses from WFA/Basin's TSO evidence, BNSF's TS Reply evidence and WFA/Basin's TS Rebuttal evidence.

**TS Rebuttal Table III-D-1  
Comparison of LRR Base Year Operating Expenses**

<b><u>Expense Category</u></b>	<b><u>WFA/Basin TSO</u></b>	<b><u>BNSF TS Reply</u></b>	<b><u>WFA/Basin TS Rebuttal</u></b>	<b><u>BNSF TS Reply Overstatement</u></b>
Locomotive Ownership	\$7,816,936	\$8,680,570	\$8,140,799	\$539,771
Locomotive Maintenance	\$7,544,279	\$8,366,966	\$7,852,787	\$514,179
Locomotive Operating	\$29,817,794	\$30,303,135	\$29,914,557	\$388,578
Railcar Lease & Maintenance	\$3,657,005	\$4,050,027	\$3,755,108	\$294,919
Material and Supply Operating	\$1,091,627	\$1,093,355	\$1,093,000	\$355
Train & Engine Personnel	\$17,035,546	\$18,634,104	\$18,534,000	\$100,104
Operating Managers	\$8,518,354	\$8,922,474	\$8,794,249	\$128,225
General & Administrative	\$10,952,188	\$10,952,188	\$10,952,188	\$0
Maintenance of Way	\$13,441,721	\$15,942,634	\$15,487,402	\$455,232
Loss & Damage	\$33,051	\$32,771	\$33,051	\$(280)
Ad Valorem Taxes	\$1,953,843	\$1,953,843	\$1,953,843	\$0
Subtotal	\$101,462,344	\$108,932,067	\$106,618,549	\$2,313,518
Insurance	\$3,259,595	\$3,485,826	\$3,411,794	\$74,033
<b>Total</b>	<b>\$105,121,939</b>	<b>\$112,417,893</b>	<b>\$110,030,343</b>	<b>\$2,387,550</b>

WFA/Basin address each of the remaining areas of difference in turn.

**1. Locomotives**

**a. Ownership and Maintenance Expenses**

BNSF accepted WFA/Basin's analysis of locomotive operating expenses as it relates to locomotive ownership and maintenance, except with respect to changes in the number of road locomotives required due to changes in transit times based on BNSF's changes to the RTC Model. As discussed in Part III-C-1-c above, WFA/Basin have made minor revisions to the inputs to the RTC Model in order to incorporate the few valid items



addressed in BNSF's TS Reply evidence. These revisions have resulted in revised train cycle times, which in turn has caused the number of SD70MAC road locomotives required by the LRR in the peak year to increase from 73 to 76 locomotives.

**b. Operating Expenses**

BNSF accepted WFA/Basin's analysis of locomotive operating expenses, except with respect to mileage-related increases due to the Jeffrey coal trains traversing an additional 2.6 miles over UP tracks from the point of connection between the LRR and UP at Northport to the actual interchange location with UP,<sup>1</sup> and the calculation of locomotive fuel costs at Orin. WFA/Basin accept the additional operating distance at Northport for the Jeffrey trains, but they disagree with BNSF's re-calculation of fuel costs at Orin.

BNSF objects to WFA/Basin's calculation of fuel costs for two reasons. First, BNSF alleges that the LRR's fuel price, which is consistent with the Board's September '07 Decision, is based on the actual cost of fuel at Guernsey and does not include the cost to transport fuel from Guernsey to Orin, a distance of 41.6 miles. To remedy this alleged error, BNSF has calculated a transportation additive of \${ } per

---

<sup>1</sup> The actual distance is 2.6 miles in the loaded direction and 1.2 miles in the empty direction (the difference is due to the fact that loaded and empty trains stop at different ends of the interchange tracks). After pointing out that WFA/Basin omitted this mileage from its operating statistics, BNSF failed to incorporate the additional distance in its calculations. WFA/Basin have included the extra operating miles for Jeffrey trains in their TS Rebuttal evidence.

gallon based on the cost to transport fuel from Guernsey to Orin via tank car. This results in an increase in fuel cost of \$484.425 in the base year. TSO Reply Narr. at III.D-2.

The premise underlying BNSF's allegation is erroneous. BNSF is correct that WFA/Basin used the "site specific" fuel cost accepted by the Board at page 38 of the September '07 Decision. However, that fuel cost is not the cost of fuel at Guernsey; rather it is the average fuel cost which BNSF submitted in its Supplemental Reply evidence filed June 15, 2006. This price reflects the weighted average cost of road locomotive fuel at seven BNSF fueling locations previously utilized in this proceeding. While the majority of the fuel in that analysis was dispensed at Guernsey, it also included fuel dispensed at six additional locations, three of which involved the use of costly Direct to Locomotive ("DTL") fueling. The average price per gallon presented by BNSF in its June 15, 2006 Supplemental Reply evidence, as accepted by the Board in the September '07 Decision and used in WFA/Basin's TSO evidence, equaled \$ { } per gallon. By comparison the average cost per gallon of road locomotive fuel in BNSF's analysis at Guernsey was \$ { } per gallon.<sup>2</sup>

To calculate road locomotive fuel cost for the LRR at Orin, BNSF did not increase the cost of fuel delivered to Guernsey. Instead, it improperly increased the

---

<sup>2</sup> The weighted average price per gallon of road locomotive fuel presented by BNSF and adopted by the Board of \$ { } and the price per gallon of road locomotive fuel at Guernsey of \$ { } is shown in BNSF June 15, 2006 Supplemental Reply e-workpaper "III-D-1 Total LRR Fuel Cost.xls," sheet "CS."

weighted average cost for road locomotive fuel for the original LRR system as a whole (including the DTL fuel cost) by its \${ } per gallon<sup>3</sup> transportation additive to yield a road locomotive cost per gallon of \${ } per gallon. Had BNSF increased only the Guernsey cost of locomotive fuel of \${ } by its Orin transportation additive, the resulting cost would equal \${ } per gallon, which is less than the \${ } per gallon used by WFA/Basin in their TSO evidence. Therefore, WFA/Basin continue to use the same price for fuel used in their TSO evidence and do not include BNSF's inappropriate transportation additive.

Second, BNSF alleges that WFA/Basin understated the cost of fueling by truck in the Orin Yard, as they did not add the cost of DTL fueling for certain loaded trains traveling between Orin Yard and Northport that require refueling. TSR Reply Narr. at III.D-2-3. To correct this "error," BNSF increased the LRR base year fuel cost by \$143,737.<sup>4</sup>

However, as discussed in Part III-C-2-a-iii above, all loaded trains that require fueling at Orin were supposed to be directed to one of the two tracks at Orin Yard that have fixed fueling facilities – thus avoiding the extra cost of DTL fueling. To correct

---

<sup>3</sup> See BNSF TS Reply e-workpaper "Moba Rate Case - Guernsey fuel source.xls." sheet "TK Car only to Orin."

<sup>4</sup> See BNSF TS Reply e-workpaper "STB Annual Statistics 3<sup>rd</sup> Supp\_071408 – base case.xls," sheet "LUMs for fuel." The calculation equals the price of DTL fuel of \${ } per gallon less the price of non-DTL fuel of \${ } per gallon multiplied by the gallons consumed by DTL-fueled trains of 5,207,214, multiplied by the "de-peaking" factor of 0.917058609.

this coding oversight in the RTC Model, the Model has been modified on TS Rebuttal so that, consistent with WFA/Basin's original intent, all loaded trains moving to Northport for interchange with BNSF for further movement toward the south are serviced in Orin Yard on a track with fixed fueling equipment. This eliminates any need for DTL fueling of the lead locomotives on these trains at Orin Yard. and WFA/Basin therefore have not increased the TSO fuel costs to reflect the additional DTL fueling.

## **2. Railcars**

BNSF accepted WFA/Basin's analysis of operating expenses as it relates to railcars, except with respect to the change in quantity and maintenance costs due to changes in transit times resulting from BNSF's changes to the RTC Model. As discussed in Part III-C-2 above, WFA/Basin have made minor revisions to the TSO RTC simulation to incorporate the few valid items raised in BNSF's TS Reply evidence. As shown in TS Rebuttal Table III-C-1 above, these revisions have caused some changes in train cycle times such that the LRR's railcar requirements in the peak year have increased from 557 railcars (per WFA/Basin's TSO Evidence) to 572 railcars which is the number used in this TS Rebuttal evidence.

In addition to the increase in railroad (LRR)-provided railcars, the number of shipper-provided railcar miles have increased from 199.3 million railcar miles reflected in WFA/Basin's TSO Evidence to 199.6 million railcar miles due to minor changes in operating miles for four movements. These changes are shown in WFA/Basin TS

Rebuttal e-workpaper “Changes to Operating Miles.xls” and are consistent with the operating miles used in BNSF’s TS Reply electronic spreadsheets.

### **3. Personnel**

With a few minor exceptions (discussed below), BNSF has accepted WFA/Basin’s revised operating personnel, as presented in WFA/Basin’s TSO evidence. BNSF has also accepted WFA/Basin’s position that the General & Administrative personnel approved by the Board in the September ‘07 Decision continue to be appropriate for the revised LRR traffic group, configuration and operating plan. In addition, BNSF has accepted WFA/Basin’s proposed compensation levels (salaries and benefits) for each position, which are unchanged from the compensation levels approved in the September ‘07 Decision. See TSO Reply Narr. at III.D-3-4.

BNSF proposes to change the LRR’s operating personnel employee counts for only three positions: train crew members (T&E personnel), Equipment Inspectors, and Crew Callers. Each of these positions is addressed below.

#### **a. Train Crew Personnel**

In its TS Reply evidence BNSF modified WFA/Basin’s TSO train crew personnel to reflect the re-crewing of loaded coal trains originating on the Campbell Subdivision and trains destined for the LRS plant at Moba Jct. TS Reply Narr. at III.D-3 and III.C-15-17. As discussed in Part III-C-2-a-iv above, WFA/Basin concur that their TSO evidence understated the number of recreds required. Based on the modified RTC

simulation conducted in connection with this TS Rebuttal evidence, and incorporating taxi travel time in on-duty time for Orin-based crews that are taxed to the mines at the beginning of their tour of duty, WFA/Basin accept BNSF's addition of 13 train crew personnel and the taxi expense associated with those employees.

**b. Non-Train Operating Personnel**

Equipment Inspectors. In their TSO evidence WFA/Basin provided for a total of 40 Equipment Inspectors. These employees provide 24/7 capability to inspect all empty coal trains that require a 1,500-mile inspection at Orin Yard, as well as staffing for an additional two-person roving inspection crew based at Orin Yard. BNSF proposes to add two employees to enable 24/7 coverage for all positions, for a revised total of 42 Equipment Inspector employees. See TS Reply Narr. at III.D-4.

Upon review of their development of revised staffing for the Equipment Inspector positions, WFA/Basin's operating experts realized that they inadvertently failed to provide sufficient employees for the intended 24/7 coverage by the two-person roving inspection crew. They agree with BNSF that two employees need to be added to provide 24/7 coverage for all Equipment Inspector positions, thus increasing the total Equipment Inspector employee count from 40 to 42.

Crew Callers. BNSF proposes to add two Crew Caller employees to the four provided by WFA/Basin, in order to provide 24/7 coverage for two positions. Id.

As described below, the LRR has one Crew Caller position which requires five employees for 24/7 coverage – not six as proposed by BNSF.

In their TSO evidence WFA/Basin provided a total of four employees to cover what the TSO Narrative describes as two crew caller positions. Id. at III-D-10 and TSO Table III-D-2. The description in the TSO Narrative is not accurate. WFA/Basin's operating experts continue to provide one 24/7 Crew Caller position, as provided for in their original non-train operating personnel staffing (and accepted by the Board in the September '07 Decision), but have eliminated the original Crew Manager Position. In their original Opening Evidence WFA/Basin's operating experts provided a Crew Manager who was on duty one shift per day and who would also perform crew-calling duties during normal business hours. However, the substantial reduction in the LRR's peak train count compared with the original peak train count means there is no need to supplement the coverage provided by a single Crew Caller position, and it is unnecessary to have a Manager simply to supervise a single employee.

However, the Crew Caller position continues to be staffed 24/7, and a total of five employees are required to staff one position on a 24/7 basis throughout the year, rather than the four posited in WFA/Basin's TSO Evidence.<sup>5</sup> Accordingly, WFA/Basin

---

<sup>5</sup> Determination of the number of employees required to staff one crew caller position 24/7 is shown in TS Rebuttal e-workpaper "Crew Callers Rebuttal.xls." This is the same calculation relied upon in WFA/Basin's Opening Evidence submitted on April 19, 2005 (see Opening e-workpaper "Personnel Counts.xls.")

have increased the number of Crew Caller employees by one to provide the needed 24/7 coverage of this position. The net result is a reduction of one position from the six posited by BNSF.<sup>6</sup>

#### **4. Maintenance-of-Way**

With respect to the LRR's annual operating cost for maintenance-of-way ("MOW"), the principal area of difference between the parties relates to the size and composition of the LRR's field maintenance forces. BNSF, through its witness Gerald Albin, first asserts that the LRR's field maintenance personnel need to be increased to the same level authorized by the Board in its September '07 Decision (a total of 97 employees, compared with the 88 comparable employees proposed by WFA/Basin).<sup>7</sup> Mr. Albin then proposes a further increase of seven employees due to the LRR's 92-mile increase in route length due to the extension from East Guernsey to Northport.

It is true that WFA/Basin's revised MOW plan (prepared by its MOW experts Michael Kenyon and Paul Reistrup) provides fewer comparable field employees

---

<sup>6</sup> The difference between the parties' Material and Supply operating expense of \$355 shown in TS Rebuttal Table III-D-1 above is that BNSF included office supplies for the extra crew caller.

<sup>7</sup> It should be noted that the field MOW personnel authorized by the Board do not include the additional four-person track crew for the sixth field track-maintenance district added by WFA/Basin's MOW experts due to the route extension to Northport. (See TSO Narr. at III-D-17-20.) BNSF concurs with the addition of this field track-maintenance district and associated four-person crew. This additional crew is included in BNSF's count of the WFA/Basin TSO Track employees shown in Table III.D-4-2 on page III.D-9 of BNSF's TS Reply Narrative (the four additional track maintenance crew members are shown separately in BNSF's Table III.D-4-3).



than those authorized by the Board in the September '07 Decision. However, with the exception of five field employees authorized by the Board which WFA/Basin's MOW experts agree should not have been omitted,<sup>8</sup> there is a good reason for the reduction: the LRR now carries considerably less traffic (gross tons) than the original LRR did because of the reduction in its coal traffic group, without any increase in total track miles.

Not only does BNSF contend that it is improper to reduce the LRR's field MOW forces from the level authorized by the Board in any respect, but it argues that a slight increase in field staffing from the Board-authorized level is warranted because of the LRR route extension to Northport and the conversion of most of the Orin Subdivision from multiple main tracks to primarily a single main track which has to carry all loaded and empty trains. TS Reply Narr. at III.D-13. BNSF's position is wrong for several reasons.

First, the LRR's total track miles are slightly less than its original track miles, notwithstanding the route extension to Northport. Second, the peak-year gross tonnage moving over the Orin Subdivision mainline has been reduced by 34% to 46%,

---

<sup>8</sup> These omitted field positions include the three-person System Track Crew, one of the two original Signal/Tech Inspectors, and the Purchasing Manager. As discussed below in the text, on rebuttal these positions have been added to the LRR's field MOW personnel, and the purchasing clerk in the Engineering General Office has been removed.

depending on the line segment.<sup>9</sup> The Orin Subdivision continues to have multiple main tracks north of Milepost 17.21, and it still has 30.5 miles of second main track south (geographically) of that point. The total reduction in main track miles on the Orin Subdivision south of Milepost 17.21 is about 35%, which is generally consistent with the gross tonnage reductions. Finally, the route extension to Northport lies in the North Platte River valley, with level grades and mostly tangent track. This is to be contrasted with the Campbell Subdivision and the northern part of the Orin Subdivision, which have rugged terrain with more grades and curves. The flat terrain between East Guernsey and Northport makes that segment of the LRR easier to maintain than the more northerly part of the railroad.

The specific differences between the parties' MOW employee counts are discussed below by category.

**a. Field Track Forces**

As BNSF points out, WFA/Basin omitted the Board-approved, three-person System Track Crew from the revised field maintenance forces presented in their TSO evidence. Omission of the system track crew was an oversight, and WFA/Basin's MOW experts concur with BNSF's Witness Albin that the system track crew (and its equipment)

---

<sup>9</sup> Compare TSO Exhibit III-C-1 with WFA/Basin Opening Exhibit III-C-1. The reduction in gross tons is more dramatic on the Reno Branch – from 95.66 million gross tons in the peak year for the LRR's original traffic group to only 20.43 million gross tons in the peak year for the revised traffic group, or a reduction of more than 78%.

continues to be needed. The addition of this crew increases the LRR's Track personnel from 55 to 58.

With the correction of WFA/Basin's inadvertent omission of the three-person system track crew (and its equipment), there is now zero difference between the STB-approved Track personnel and WFA/Basin's revised Track personnel for the original portion of the LRR. As noted above, WFA/Basin have added one four-person track-maintenance (section) crew to accommodate the LRR's route extension from East Guernsey to Northport, making a total of six section crews. BNSF does not dispute that six section crews are adequate for regular maintenance of the LRR's track.

BNSF proposes to add three field positions to the Track Department, over and above those approved by the Board and the sixth section crew, due to the Northport extension. These include a Track Inspector, a Welding Crew Member, and a Machine Operator/Truck Driver. TS Reply Narr. at III.D-19-22. None of these additional positions is needed.

Track Inspector. WFA/Basin's original MOW plan provided for four track inspectors, a number agreed to by BNSF and accepted by the Board. WFA/Basin's MOW experts saw no need to increase the number of track inspectors due to the extension to Northport because of the small net increase of 21 route miles per inspector<sup>10</sup> and the slight

---

<sup>10</sup> The 92-mile route extension to Northport is partially offset by a reduction in route miles in the Campbell/Donkey Creek area (primarily on the Black Hills

(continued...)

reduction in total track miles. BNSF's Witness Albin argues that a fifth track inspector is now needed "to maintain a manageable ratio of route and track miles per inspector." TS Reply Narr. at III.D-19-20. Mr. Albin must be referring to route miles here, since the average number of track miles per inspector (with four inspectors) has decreased from 112 to 111 miles.<sup>11</sup> However, Mr. Albin fails to explain why an increase of only 21 route miles per inspector (from 54 to 75) is unmanageable. He also fails to mention the fact that the modest increase in route miles per inspector is accompanied by a substantial decrease in traffic, which means fewer train delays (and more on-track time) for the inspectors.

In short, BNSF has failed to justify the addition of a fifth track inspector and the Board should therefore accept the four inspectors proposed by WFA/Basin.

Welding Crew Member. WFA/Basin's MOW experts originally provided for a total of six welding crew members, divided into three two-person welding/grinding

---

<sup>10</sup> (...continued)

Subdivision). The net increase in constructed route miles is 83.5 (301.45 minus 217.95), or an average of just under 21 miles per inspector for the four track inspectors.

<sup>11</sup> Mr. Albin states (TS Reply Narr. at III.D-20) that the average assigned territory for a track inspector is 90 track miles. In the experience of WFA/Basin's MOW experts, territories of 100 or more track miles per inspector are common. Mr. Albin apparently agrees, as he has been BNSF's MOW witness throughout this proceeding and he originally accepted LRR inspection territories that averaged 112 track miles per track inspector with substantially higher average gross tons per mile and daily train counts. Mr. Albin does acknowledge that the LRR's original 112 track miles per inspector have been reduced to 111 miles per inspector with four inspectors. Id.

crews.<sup>12</sup> BNSF's Witness Albin proposes to add one welder/grinder to the LRR's field track-maintenance personnel due to the 92-mile route extension from East Guernsey to Northport, for a total of seven. TS Reply Narr. at III.D-21. Mr. Albin's only stated reason for the additional welder/grinder position is that "[i]t is important to increase the number of welders to cover the territory because much of their time is spent traveling from one priority project to another and the increased 92-mile territory requires an additional person to handle this work." Id. However, Mr. Albin ignores several salient factors that more than offset the additional travel time due to the route extension to Northport.<sup>13</sup>

As Mr. Albin correctly notes (id.), the primary tasks of the welder/grinders are to replace broken or defective rails and grind switch points, frogs and stock rails. The LRR's reduced traffic density means there will be fewer broken rails per mile per year, which helps to offset the additional distance between East Guernsey and Northport. The LRR's revised configuration has also resulted in a reduction in the number of turnouts (switches), which further reduces the workload for these employees by reducing the amount of switch grinding needed.

Specifically, the original LRR configuration as approved by the Board had a total of 342 turnouts; the new configuration has a total of 245 turnouts, or a reduction of

---

<sup>12</sup> See WFA/Basin's Opening Narr. at III-D-86.

<sup>13</sup> As noted earlier, the 92-mile extension to Northport is partially offset by the reduction in route miles in the Campbell-Donkey Creek area.

28.4%.<sup>14</sup> The welder/grinders concentrate primarily on the mainline turnouts, which in this case consist largely of No. 20 turnouts. The LRR originally had a total of 185 No. 20 turnouts; the new configuration has 110 No. 20 turnouts, or a reduction of 40.5%. The much smaller number of mainline and other turnouts requiring periodic grinding certainly offsets increased travel time for covering the added territory between East Guernsey and Northport.

As noted above, the six welder/grinders proposed by WFA/Basin are divided into three two-person teams. The net addition of 83.5 total route miles to the LRR system adds an average of only 28 route miles to the territory of each crew. This is certainly manageable given the substantial reduction in turnouts described above.

Machine Operator/Truck Driver. Mr. Albin asserts that the extension of the LRR to Northport also requires the addition of one machine operator/truck driver to the seven provided by WFA/Basin "to work with spot surfacing and ditching crews on the new territory." TS Reply Narr. at III.D-20. However, other than stating the fact of the route extension and describing the responsibilities of the spot surfacing and ditching crews, Mr. Albin provides no explanation of why an additional machine operator/truck driver is needed, and he overlooks a number of considerations in reaching his conclusion. First, the LRR's lower traffic density (tonnage) means that less spot surfacing is required per mile. Second, machine operators normally travel on their own time to the place where

---

<sup>14</sup> See TS Rebuttal e-workpaper "III-F TOTAL WFA THIRD SUPP REB.xls."

the equipment is employed each day, which means no on-duty time is required to travel the additional route mileage. Third, the Northport extension lies in the broad valley of the North Platte River with much flatter terrain than the more northerly part of the LRR. This means there are fewer ditches and thus that less ditching work per mile is needed.

Mr. Albin also asserts that machine operators/truck drivers are needed to assist the system track crew (id. at III.D-20-21) because more ditching, surfacing, and ballast regulating will be needed due to the longer route. However, surfacing and regulating will actually decrease due to lower density on essentially the same number of track miles and the shifting of track miles from the more severe operating conditions on the Orin Subdivision, with its sharp curves and heavy grades, to the gentle and open North Platte River valley with its long tangents and light-degree curves.

Mr. Albin further notes (id. at III.D-19) that the reconfigured LRR has “increased numbers of bridges, culverts, overpasses and road crossings.” However, while there may be more locations of these structures due to the LRR’s added length, ballast work is actually driven by the number of linear track feet in the bridges, road crossings and culverts. Mr. Albin has offered no substantiation that the linear feet of bridges, road crossings and/or culverts has increased from the original configuration, or that the increase (if any) is sufficient to justify an additional machine operator/truck driver.

**b. Signals and Communications**

In their TSO evidence, WFA/Basin revised the Signals and

Communications function to reflect separate supervision and separate field employees for each sub-function, as required by the September '07 Decision. In this regard, WFA/Basin added a second field Signal/Communications Supervisor, making one supervisor primarily responsible for the signals function and the other primarily responsible for the communications function. In its TS Reply Evidence BNSF appears to confuse the second field supervisor with the two "Signals Foreman" positions approved in the September '07 Decision. See IS Reply Narr. at III.D-24 and TS Reply e-workpaper "Spot Maint bnsf3rdrep.xls." The second field supervisor position actually replaces the second "foreman" position as described by the Board, so there is not in fact a disconnect between WFA/Basin's TSO evidence and the September '07 Decision with respect to field supervision of the signals and communications functions.<sup>15</sup>

BNSF Witness Albin nonetheless asserts that WFA/Basin omitted two signals and two communications personnel from the field personnel approved by the Board in the September '07 Decision. BNSF Reply Narr. at III.D-15. According to Mr. Albin, the omitted signals personnel include one of the two Signal/Tech Inspectors and one of the 13 Signal Maintainers authorized by the Board, and the omitted

---

<sup>15</sup> There is no need for any foremen in addition to what are now effectively separate field Supervisors for signals and communications and the general office staff which includes a Signal & Communications Engineer an Assistant Signal Engineer, and an Assistant Communications Engineer.



communications personnel include the Communications Foreman and one of the two Radio Technicians authorized by the Board.

WFA/Basin's MOW experts concur with Mr. Albin that the second Signal/Tech Inspector position should not have been removed, and should be restored given the LRR's route extension from East Guernsey to Northport. They disagree that the Communications Foreman was omitted (this position appears to duplicate the second Signal Communications Supervisor that WFA/Basin added with primary responsibility for the communications function). The number of signal maintainers needed is a function of the correct number of AAR signal units. WFA/Basin's MOW experts also agree that there is a need for another Microwave Technician.

**i. Signal Maintainers**

BNSF proposes to add a total of four Signal Maintainer positions to the 12 positions proposed by WFA/Basin in their TSO evidence, for a total of 16. The reasons for the increase are that WFA/Basin improperly used the "AAR units per unit" from their original rebuttal evidence, rather than the number from their original opening evidence which the Board accepted, and there is a net increase in the number of AAR signal units due primarily to the route extension to Northport. TS Reply Narr. at III.D-22-24.

WFA/Basin/s MOW experts agree that they understated the AAR units per unit. They also concur that they understated the number of AAR units, and they accept

BNSF's "3<sup>rd</sup> Reply" signal unit count in Table III.D.4-7 and the total number of signal maintainers (16) proposed by BNSF.

**ii. Communications**

In their TSO evidence WFA/Basin did not include the Communications Foreman and the second Radio Shop Technician that the Board authorized for the original LRR in the September '07 Decision. However, the Board authorized these positions because it accepted BNSF's argument that the signals and communications functions needed to be separated, and it therefore accepted BNSF's proposed staffing (except for the number of signal maintainers, which the Board recognized to be a function of the number of AAR signal units). Id. at 63.

With respect to the Communications Foreman, BNSF's original explanation for adding this position is unclear, and the foreman position appears to duplicate the Communications Supervisor position BNSF also added in its original Reply Evidence.<sup>16</sup> As mandated by the Board, WFA/Basin have now split the field signals and communications functions, and they added a second field Signal/Communications Supervisor so that one supervisor can be responsible for the signals function and the other for the communications function. See TSO Narr. at III-D-22. Additional supervision is provided by the Chief Engineer's headquarters staff, which includes a Signals and

---

<sup>16</sup> See BNSF's Original Reply Evidence Narrative filed July 20, 2005, Vol. I ("2005 Reply Narrative") at III.D-167-68.

Communications Engineer and two Assistant Engineers, one for signals and the other for communications. Id. at III-D-24. This is plenty of supervision for the communications function, and there is no good reason to add a foreman to further supervise the two Communications Maintainers (who are based at different locations).

As for the Radio Shop Technicians, WFA/Basin did not include these positions in its original MOW staffing. BNSF included two such positions in its original Reply Evidence on MOW personnel, which the Board accepted because of its general acceptance of BNSF's proposed separate communications personnel. BNSF's original rationale for including these positions was that radio shop technicians are needed to maintain the LRR's radios (primarily locomotive radios but also portable radios) at a centralized radio repair shop. See 2005 Reply Narrative at III.D-169. BNSF did not explain why two radio shop technicians were needed. In any event, even if two radio shop technicians were appropriate for the original LRR, only one is needed now because of the reduction in the LRR's traffic volume and the corresponding reduction in the total number of locomotives required for the peak traffic period. The LRR's original peak locomotive requirements were 104 SD70MAC road locomotives and 13 SD40-2 helper/switch/work locomotives, or a total of 117 locomotives<sup>17</sup> (each of which has a radio). The revised locomotive requirements are 76 road locomotives and eight helper/switch/work locomotives, or a total of 84 locomotives. Given the 28% reduction

---

<sup>17</sup> See September '07 Decision at 35.

in the LRR's total locomotive (and corresponding locomotive radio) requirements, and the fact that radio maintenance is partially contracted out.<sup>18</sup> there is no valid reason for having two radio shop technicians rather than one.

In addition to the communications staffing level adopted by the Board in the September '07 Decision, BNSF's Witness Albin also proposes to add one Microwave Technician position to the three such positions it originally proposed and that were accepted by the Board. The reason for adding this position is that the 92-mile route extension to Northport requires the addition of 10 microwave towers and substations on the new territory, representing an increase of 30% from the original inventory of microwave towers. TS Reply Narr. at III.D-24. On further review WFA/Basin's experts agree that an additional Microwave Technician is needed due to the increase in microwave tower sites, for a total of four positions

**c. Purchasing**

In its September '07 Decision the Board accepted BNSF's proposal for a three-person Purchasing/Materials Management Department consisting of a Purchasing Manager, a Machine Operator (forklift) and a Truck Driver. Id. at 64-65; see also BNSF's 2005 Reply Narrative at III.D-171-172. In their TSO evidence, WFA Basin reorganized the MOW purchasing function into one field position (a Crane

---

<sup>18</sup> See TS Rebuttal c-workpaper "Spot Maint WFA Third Supp Rebuttal.xls," sheet "Contract Work."

Operator/Truck Driver-Purchasing) and one Engineering general office position (a Clerk-Purchasing). Id. at III-D-23. BNSF's Witness Albin asserts that WFA/Basin reduced the Purchasing/Materials Management positions from three to one, but in fact WFA/Basin reduced the employee count from three to two (a reduction of one position) since they added one field position and one general office position.

There is no reason for separate machine operator and truck driver positions to handle materials management. As is the case with the combined machine operator/truck driver positions in the Track department (to which BNSF did not object), one person can handle both functions which will be based at the same location (the Orin headquarters). The relocation of the LRR's headquarters from Guernsey to Orin means the base location of the purchasing truck driver is now closer to the middle of the system rather than at one end, which means system logistics are improved with the truck able to complete more one-day round trips than with the original configuration.

Nor is there any valid reason to have yet another manager position to handle the purchasing function. WFA/Basin have provided for a Manager of Administration and Budgets in the Engineering general office, and it makes more sense to add a clerk devoted to the purchasing function under this manager's direction than to add yet another field manager whose duties are limited to purchasing. However, to eliminate controversy as to whether this position should be a managerial or clerical position, WFA/Basin's MOW experts have converted the Clerk-Purchasing to a Purchasing Manager (with a

corresponding increase in salary) and, consistent with BNSF's treatment, moved the position from the Engineering general office to the field. This results in one addition to the field purchasing department, with a corresponding decrease in the general office Engineering personnel by one which is consistent with BNSF's staffing level.

\* \* \* \*

TS Rebuttal Table III-D-2 below summarizes WFA/Basin's revised MOW personnel in comparison with its TSO personnel, the personnel accepted by the Board in the September '07 Decision, and BNSF's TS Reply personnel.

<b>TS Rebuttal Table III-D-2 LRR MOW Personnel</b>				
<b><u>Dept./Position</u></b>	<b><u>WFA TSO</u></b>	<b><u>STB</u></b>	<b><u>BNSF TS Reply</u></b>	<b><u>WFA TS Rebuttal</u></b>
Track	55	54	61	58
Signals	20	22	25	25
Communications	8	10	11	9
B&B	7	7	7	7
Electrical	1	1	1	1
Purchasing	1	3	3	2
<b>Total Field</b>	<b>92</b>	<b>97</b>	<b>108</b>	<b>102</b>
Main Office Personnel	15	14	14	14
<b>Total MOW</b>	<b>107</b>	<b>111</b>	<b>122</b>	<b>116</b>

**d. Small Tools Additive**

WFA/Basin accept BNSF's technical correction to the small tools additive.

See TS Reply Narr. at III.D-25-26.

**e. Equipment**

BNSF notes that "WFA/Basin made no changes to the annual spot maintenance equipment inventory and costs to account for the additional territory, despite their acknowledgment that the expansion of the LRR would require a sixth 4-man section crew." TS Reply Narr. at III.D-28. BNSF Witness Albin then added the equipment appropriate for the additional section crew, as well as a hi-rail truck for his proposed fifth track inspector and four radios. Id. at III.D-26-27.

There is no need to add equipment for the sixth section crew, as WFA/Basin simply incorporated into their spot-maintenance spreadsheet all of the equipment accepted by the Board in the September '07 Decision. This included equipment for seven sets of track crews.<sup>19</sup> In fact, with the addition of both the sixth section crew and the system track crew (which WFA/Basin inadvertently omitted from their TSO field

---

<sup>19</sup> Compare the Board-approved equipment list in "STB Spot Maint Rebuttal.xls," sheet "Annual Spot Equip" with WFA/Basin's TSO e-workpaper "Spot Maint wfa3rdsup.xls," sheet "MOW Personnel." The Board provided equipment for seven track crews because it accepted BNSF's original equipment count (which included equipment for a district track gang in addition to the system track crew and the original five section crews, which the Board rejected) even though it acknowledged that BNSF's equipment was overstated because its field MOW staffing was overstated. See September '07 Decision at 67.

personnel, as described earlier), the correct total number of field track crews is seven – a number that BNSF accepts. By adding additional equipment for the sixth section crew to the equipment previously approved by the Board, Mr. Albin is actually providing equipment for eight track crews. This effectively double-counts the equipment for one of the crews.

There is no need for an additional track inspector position, for the reasons described in Part III-D-4-a above. Therefore, there is no need for an additional hi-rail truck (or radio) for this inspector. Since the STB originally provided equipment for seven field track crews, there is no need to add two radios for the sixth section crew. Nor is another radio needed for the added Microwave Technician described above. In their TSO evidence WFA/Basin continued to use the Board-approved quantity of radios (362) even though the number of radios actually needed is lower due to the reduction in T&E personnel resulting from the LRR's substantially reduced traffic volume. Thus, there are ample radios to provide one to the additional Microwave Technician.

**f. Contract Services**

WFA/Basin accept BNSF's minor revisions to MOW contract costs. See TS Reply Narr. at III.D-27-29.

**g. Summary**

The LRR's revised total annual MOW budget for the revised staff and equipment described above that is assigned to operating expense in the first year of



operations is \$15.49 million. This represents an increase of about \$2 million over the amount shown in WFA/Basin's TSO evidence, and a reduction of \$455,000 from the amount shown in BNSF's TS Reply Table III.D.4-11. Details are provided in TS Rebuttal e-workpaper "Spot Maint WFA Third Supp Rebuttal.xls," sheet "Spot Maintenance Summary."

**5. Leased Facilities**

BNSF states that it "accepts" WFA/Basin's TSO statement that the LRR has no leased facilities. TS Reply Narrative at III.D-30. However, on rebuttal WFA/Basin have accepted BNSF's position that the LRR must operate over 2.5 miles of UP trackage at Northport to reach the interchange point for the Jeffrey trains, and thus that its route includes 2.5 miles of trackage rights over UP. There is no lease or other joint facility cost associated with these trackage rights.

**6. Loss and Damage**

BNSF states that it accepts WFA/Basin's TSO methodology for calculating loss and damage expenses, but that WFA/Basin's calculation uses the wrong net tons. TS Reply Narr. at III.D-31. WFA/Basin disagree that they used the wrong net tons and they disagree with BNSF's revised tons calculation.

The number of net tons shown in BNSF's TS Reply calculation (63,135,509) is the number of net tons the LRR handles in calendar year 2006, not the number of net tons handled in the base year (4Q04 through 3Q05). The number of net

tons calculated for the base year is 62,756,471,<sup>20</sup> and that is the number WFA/Basin's experts correctly used to calculate loss and damage expenses.

WFA/Basin also note that BNSF did not actually use the 63,135,509 number shown in the text to calculate loss and damage expenses. Instead, it used 62,224,608 tons which was determined by multiplying the 2005 net tons of 63,135,509 by 0.985572292, a hard-coded number from BNSF's TS Reply e-workpaper "LRR Loading Fees 071408-base case.xls," sheet "Volume" which is neither sourced nor explained. BNSF has presented no reason for departing from the Board-approved methodology that WFA/Basin used in their TSO Evidence.

## **7. Insurance**

BNSF has accepted WFA/Basin's methodology for calculating insurance expenses. TS Reply Narr. at III.D-31. The parties thus agree that insurance expense is equal to 3.2 percent of other operating expenses. The actual insurance expense has changed from the TSO number due to the change in total operating expenses presented in this TS Rebuttal evidence. See TS Rebuttal e-workpaper "STB Operating expense 3rd Supp Reb\_081508.xls," sheet "DCF Transfers" for details.

---

<sup>20</sup> This number was calculated by using the actual net tons for 4Q04 plus 75 percent of the net tons that moved in 2005. This methodology was accepted by the Board at p. 55 of the September '07 Decision

**8. Ad Valorem Tax**

BNSF has accepted WFA/Basin's methodology for calculating ad valorem taxes, as well as the amount. See TS Reply Narr. at III.D-31.

III-E Non-Road  
Property Investment

### **III. E. NON-ROAD PROPERTY INVESTMENT**

In Part III.F of its TS Reply Narrative BNSF does not take issue with any of the statements in Part III-F of WFA/Basin's TSO Narrative. Instead, BNSF simply notes that its discussion of the LRR's investment in locomotives, railcars and other equipment is included in other sections of its Reply Narrative.

WFA/Basin note that, on rebuttal, they have accepted BNSF's position that the revised LRR system encompasses 2.5 joint facility miles, consisting of trackage rights over UP to reach the LRR/UP interchange point at Northport, NE. See Parts III-B-1-a and III-D-5 above. As noted in those sections, the LRR incurs no lease or other joint facility investment cost for these trackage rights.

III-F Road Property  
Investment

### **III. F. ROAD PROPERTY INVESTMENT**

On May 13, 2008, WFA/Basin submitted their TSO road property investment evidence, which modified the LRR's original investment costs to reflect the configuration changes made by WFA/Basin's operating witnesses. In making the investment modifications, WFA/Basin's engineering experts utilized the methodologies and unit costs approved by the Board in the September '07 Decision, except where the configuration changes required a departure from the approved methods and costs.

BNSF's TS Reply evidence largely accepts the WFA/Basin's revised road property investment costs. Indeed, the difference separating the parties is only \$31.8 million. As shown below, most of the cost disparity between the parties stems from disputes concerning the need for and cost of certain facilities at the Orin Yard. WFA/Basin dispute most of BNSF's proposed changes to the Orin Yard. For the balance of the disputed costs, WFA/Basin have largely accepted BNSF's corrections and modifications to their TSO road property investment costs.

As changes to the Orin Yard drive the principal investment cost differences between the parties, WFA/Basin have elected to address the Orin Yard investment costs in a separate section immediately below. The balance of the disputed items are addressed under their relevant headings in the Board-approved outline format.

The LRR's revised road property investment costs are summarized in TS Rebuttal Table III-F-1 below.

**TS REBUTTAL TABLE III-F-1**  
**LRR Road Property Investment Costs**

Item	WFA/Basin TS Opening	BNSF TS Reply	WFA/Basin TS Rebuttal
1 Land	\$ 11 0	\$ 11 0	\$ 11 0
2 Roadbed Preparation	174 3	174 8	174 8
3 Culverts	15 7	16 1	15 7
4 Track	309 8	311 5	311 5
5. Tunnels	28 6	28 6	28 6
6 Bridges	59.0	75 8	59 6
7. Signal & Communications	59.3	61 7	61 7
8 Buildings & Facilities	36.1	36 4	36 5
9 Public Improvements	7.8	11.4	11 5
10 Subtotal	\$ 701.8	\$ 727 3	\$ 711 0
11 Mobilization	\$ 20.7	21 6	21 0
12 Engineering	69 1	71 6	70 0
13 Contingency	<u>78 1</u>	<u>81.0</u>	79 1
14 Total Road Property Investment Costs	\$869 7	\$ 901 5	\$ 881 2

**SUBPART I**  
**ORIN YARD INVESTMENT COSTS**

In the LRR's revised configuration the Orin Yard is now the LRR's only yard. A variety of tasks that were conducted at the LRR's original Guernsey Yard are now conducted at Orin Yard, including fueling and servicing of locomotives and performance of 1,500-mile car inspections and related switching. The yard also serves as a crew change point and a MOW base. The yard contains several other facilities, including a locomotive shop and a car shop. Further details on the Orin Yard are provided in Part III-B-3 of WFA/Basin's TSO Narrative.



BNSF largely accepts the configuration of Orin Yard as proposed by WFA/Basin's operating and engineering experts (including the track configuration). However, BNSF has proposed a variety of modifications to the yard that significantly increase the investment costs for the facility. As detailed below, with few exceptions, BNSF's proposed modifications are unwarranted and unsupported.

In order to aid in discussing the cost differences between the parties, TS Rebuttal Table III-F-2 below lists the various Orin Yard items that the BNSF has proposed to modify and whether WFA/Basin have accepted those changes or believes they are unwarranted. WFA/Basin then discuss each of the items in turn.

<b>TS REBUTTAL TABLE III-F-2</b> <b><u>ORIN YARD – DISPUTED MODIFICATIONS AND COSTS</u></b>	
<b><u>BNSF Proposed Change</u></b>	<b><u>WFA/Basin Response</u></b>
Vehicular access between south and north sides of yard needed at two locations	Disagree
Additional ROW land needed around the car shop tracks	Disagree
Additional ROW land needed around yard buildings	Agree
Replace three proposed culverts with railroad and vehicular bridges	Disagree
Construct large box culvert, vehicular overpass, and roadway for yard access adjacent to the car shop	Disagree
Construct roadway and railroad bridge for yard access near the locomotive shop	Agree
Add crossing materials at the end of yard tracks	Agree

**1. Vehicular Access Between the South and North Sides of the Yard**

The locomotive fueling/servicing facilities, locomotive shop, and car shop are all located on the geographical north side of Orin Yard, while the headquarters and other buildings (as well as public access roads) are located on the geographical south side of the yard. See TSO Exhibit III-B-1, page 5. As BNSF correctly notes, vehicular access from the south side to the north side of the yard is therefore needed.

BNSF's engineering witness, Cassie Gouger ("BNSF's engineer"), proposes to construct two grade-separated access roads between the south and north sides of Orin Yard, one of which would be located at the geographical west end of the yard to provide access to the locomotive shop and servicing facilities and the other of which would be located toward the east end of the yard to provide direct access to the car shop. These access roads are described at pp. III.B-5-7 of BNSF's TS Reply Narrative.

As explained in Part III-C-4-a above, there is no need for two separate access roads between the south and north sides of the yard. A single access road, at the west end of the yard, is sufficient for operating purposes, to provide vehicular access to all of the facilities located on the north side of the yard. Accordingly, WFA/Basin's engineering experts have accepted BNSF's proposal to construct a grade-access road at that location. Construction of a second expensive, grade-separated access road just to reach the car shop is unnecessary.

**2. ROW and Facilities to Accommodate and Access the Car Shop**

BNSF proposes to acquire additional land and build extensive facilities to accommodate a second access road that reaches the car shop. See TS Reply Narr. at III.F-3-4 and III.B-4-8. In particular, BNSF proposes to access the car shop via a roadway bridge, a 508-foot box culvert and a 3,250-foot access road. As explained above, a separate entrance to the geographical north side of the yard just to reach the car shop is not warranted, as the car shop can easily be reached via the grade-separated road crossing at the west end of the yard. Thus, additional land and facilities to accommodate the second road access are unnecessary, and WFA/Basin have not included the additional land or construction costs in their TS Rebuttal land quantities and costs.

As explained in Part III-C-4-a above WFA/Basin have included a gravel road that extends from the locomotive shop to the car shop. This road enables vehicles to access the car shop area from the access road at the west end of the yard. Its construction does not require any additional land to be acquired, because WFA/Basin's engineers included a 50-foot buffer around the outside of the yard – more than ample room to place a gravel road. Apparently, BNSF's engineer was unaware that WFA/Basin had included this 50-foot buffer in its TSO design. See TS Reply Narr. at III.F-4. However, in the relevant TSO e-workpaper, "WFA LARAMIE RIVER STICKS MAY 5.13.08.dwg," the area was included on the Autocad layer marked "Orin yard for sticks\$0\$AREA." Thus, there is no need for the LRR to acquire any additional acreage for this road.

### **3. ROW for Buildings**

WFA/Basin agree that the appropriate space for the headquarters, MOW and crew change buildings was omitted. WFA/Basin's engineers have determined that the needed acreage is 4.15. See TS Rebuttal e-workpaper "WFA THIRD SUPP REB Building Site Development Costs.xls." This additional land is included in WFA/Basin's TS Rebuttal land acquisition costs. See TS Rebuttal e-workpaper "STB LRR Land Costs Revised.xls."

### **4. Replacement of Proposed Culverts with Bridges**

In their TSO evidence, WFA/Basin's engineers eliminated three existing railroad bridges in the area that is now the LRR's Orin Yard. In their place, WFA/Basin placed 96-inch culverts to accommodate any occasional water that might need to flow across the yard, which need was minimal given that the bridges span what BNSF describes as ditches. The rationale for the replacement was that when constructing a yard with many tracks it is far simpler to accommodate those tracks by installing a culvert rather than building many parallel bridge structures.

BNSF takes issue with WFA/Basin's approach. In particular, BNSF's engineer suggests that these bridges do not cross mere ditches, that the whole of the area under the bridge must be replicated, that the BNSF is currently double-tracking in this area and building bridges and so too must the LRR, and finally that a complete hydrological examination would be required before proceeding with culverts. See TS

Reply Narr. at III.F-5-10. Thus, BNSF's engineer proposes to build bridges rather than a culvert for each of the impacted yard tracks, and also adds vehicular bridges for the inspection roads that run parallel to the impacted yard tracks.<sup>1</sup> As shown below, these proposals are without merit.

BNSF's engineer asserts that the replaced bridges cross drainage areas and not simply ditches. WFA/Basin's engineers never suggested that there is no drainage in this area; hence the inclusion of the 96-inch culverts. However, BNSF's engineer has incorrectly assumed that the drainage required exceeds what a 96-inch culvert could accommodate.

BNSF's faulty conclusions regarding the drainage requirements for the new culverts are explained in several ways. First, in her TS Reply e-workpaper "USGS Orin WY Waterways.pdf," BNSF's engineer incorrectly marked two drainage areas as those leading to two of the replaced bridges, bridge MP 125.39 and bridge MP 124.75. See TS Reb. e-workpaper "Drainage Area Map.pdf." In fact, the incorrectly attributed drainage areas lead to an 84-inch culvert at MP 125.28 and a double 72-inch culvert at MP 124.95. Id.

---

<sup>1</sup> BNSF also added a vehicular bridge near the locomotive shop because the drainage area accommodated by the new culvert at MP 125.39 runs under the access road to the locomotive shop. See TS Reply Narr. at III.F-23. WFA/Basin reject this additional bridge for the reasons enumerated herein.

BNSF's error is significant. In particular, the drainage areas – which actually lead to existing culverts, rather than to the bridges that WFA/Basin proposes to replace with culverts. as BNSF's engineer thought – cover 254 acres (for the culvert at MP 125.28) and 196 acres (for the culvert at MP 124.95). Id. The drainage areas leading to the bridges to be replaced with culverts cover 158 acres (bridge at MP 125.39) and 136 acres (bridge at MP 124.75). Id. Thus, the drainage areas leading to the bridges are smaller than those leading to the existing culverts, yet WFA/Basin have proposed to use culverts larger than the existing culverts that handle larger drainage areas. See TS Rebuttal e-workpaper "Drainage Area Map.pdf." WFA/Basin's engineers use of the 96-inch culverts in these two locations thus is plainly feasible – in fact the drainage requirements at each location can actually be accommodated with 60-inch CMP culverts. However, WFA/Basin's engineers opted to use a very conservative approach in their TSO design for Orin Yard. See TS Rebuttal e-workpaper "AREMA Culvert Nomographs.pdf."

The third new culvert at MP 123.34 handles a drainage area of 288 acres. See TS Rebuttal e-workpaper "Drainage Area Map.pdf." A 96-inch culvert can easily accommodate the drainage for this acreage. For example, the existing 4' x 5' box culvert at MP 126.13 accommodates the drainage for 326 acres. Id. A 4' x 5' box culvert has a flow area of only 20 sq. feet, while a 96-inch culvert has a flow area of 50 sq. feet. Hence, without any extensive hydrological examination, it was apparent to WFA/Basin's

engineers, as it should have been to BNSF's engineer, that a 96-inch culvert would suffice because even a 100-year storm event could be accommodated. See TS Rebuttal e-workpaper "AREMA Culvert Nomographs.pdf" for WFA/Basin's confirming calculations.

Another obvious flaw in BNSF's argument against the use of culverts is its assumption that a bridge of a certain length and height can only be replaced by a culvert whose capacity matches the area under the existing bridge. Plainly this is incorrect. A bridge may be a certain length and height for a variety of reasons, including maintenance of the ruling grade or to bridge a particular geographic feature, such as a road. At the same time, little or no water may actually pass under the bridge. The only relevant inquiry is the water flow that must be accommodated by the culvert, which BNSF made no effort to quantify.<sup>2</sup>

WFA/Basin further dispute BNSF's argument that because BNSF is currently double-tracking in the area of the Orin Yard, and that it is using bridges rather than culverts for the second track, it necessarily follows that bridges are required for the

---

<sup>2</sup> The BNSF engineer's reliance on a formula used by WFA/Basin in their TSO e-workpaper "Restated Culvert Quantities and Costs wfa3rdsupp.xls," tab "SCD Culvert Total Cost," column N to demonstrate what size it believes the new culverts need to be (as shown in TS Reply Table III.F-2) is misplaced. WFA/Basin only applied that conversion to calculate for an equivalent box culvert size when replacing smaller bridges, but that conversion was a simplifying mechanism to avoid hydrological examination for each area. For the longer bridges being replaced at Orin Yard, WFA/Basin's engineers examined the drainage area under each bridge and opted to conservatively use the 96-inch culverts at those locations.

LRR. See TS Reply Narr. at III.F-10. This argument is without merit. BNSF's decision to add bridges at these locations proves nothing as to the feasibility of using culverts. Indeed, BNSF does not suggest that if it was going to build a large yard in this area it would use bridges. Moreover, adding a second bridge is simpler than dismantling an existing bridge and placing culverts to accommodate the old and new mainline tracks. Adding a second bridge also simplifies the engineering process to the extent that replicating an existing bridge does not require a reexamination of the territory. In other words, BNSF's use of another bridge in building a second main track at these locations is not dispositive insofar as the LRR's construction needs are concerned.

In addition to the many additional railroad bridges that BNSF's engineer proposes to built in Orin Yard, she also proposes to build a series of bridges that yard vehicles, such as inspection vehicles and DTL fueling trucks, can to use to move parallel to the yard tracks. For the same reasons that additional railroads bridges in the yard are not necessary, WFA/Basin's engincers also excluded vehicular bridges running between the railroad bridges since the space between the tracks has been included in the total required culvert length. Thus, the areas between the tracks will be filled in and the gravel roads that run between the tracks that WFA/Basin provided in its TSO evidence will be used by the inspectors.<sup>3</sup>

---

<sup>3</sup> As addressed in Part III-C-2-a-iii above, DTL fueling will not be used in the Orin Yard. Thus, there is no need to make specific accommodations for fuel trucks.



**5. Railroad Bridge and Access Road to the Locomotive Shop Area**

As indicated above, BNSF has correctly noted that WFA/Basin did not provide a means of reaching the locomotive shop and servicing facilities on the north side of Orin Yard from a public road on the south side of the yard. BNSF proposes to add a two-track railroad bridge, and a two-lane road under the bridge, at MP 126.29, to access these facilities. WFA/Basin's operating experts agree with this proposal (see Part III-C-4-a above), and WFA/Basin's engineers have reviewed and accepted BNSF's costs for these items. See TS Rebuttal e-workpapers "WFA THIRD SUPP REB Building Site Development Costs.xls" and "LRR Bridge Costs WFA 3rd REBUTTAL.xls."

**6. Crossing Materials In the Orin Yard**

WFA/Basin inadvertently omitted crossing materials at the ends of the Orin Yard tracks, which are needed for inspection vehicle access to the different inspection roads running parallel to (and between) the yard tracks. BNSF added these materials (see TS Reply Narr. at III.F-28, but it understated the required number of crossings as eight because it incorrectly assumed that there were four access road when, in fact, there are six access roads requiring 12 crossings (one at each end of the yard). Thus, WFA/Basin added the crossing materials for the 12 crossings. WFA/Basin also added five crossings to accommodate the gravel road running from the locomotive shop to the car shop. See TS Rebuttal e-workpaper "WFA THIRD SUPP REB Building Site Development Costs.xls."

**SUBPART II**  
**ITEMIZED RESPONSES TO BNSF'S TS REPLY EVIDENCE**

**1. Land**

With the exception of the slight variation in total acreage for the Orin Yard addressed above, the parties agree on the total acreage required by the LRR and its acquisition cost. Thus, the parties' total land costs differ by only \$6,921 (\$10,993,072 per BNSF and \$10,986,151 per WFA/Basin TS Rebuttal).

**2. Roadbed Preparation**

The parties agree on the unit costs applicable to all of the various roadbed preparation items. With the exception of the Orin Yard items discussed above and those specifically noted in this section, the parties also agree on the quantities and total costs. WFA/Basin's expert engineering witnesses, Harvey Stone and Charles Stedman, have therefore made only minor revisions to the LRR's roadbed preparation costs for purposes of this TS Rebuttal submission.

**a. Earthwork for Mainline Tracks**

As noted in Part III-B-1-b above, WFA/Basin inadvertently omitted the two-mile Winters siding located on the Valley Subdivision from its TSO road property investment costs. BNSF added the necessary earthwork for this mainline track. See TS Reply Narr. at III.F-5. WFA/Basin's engineers agree with BNSF's calculations of the cost and quantities associated with the earthwork for this additional siding, and they have

added it to their TS Rebuttal earthwork costs. See TS Rebuttal e-workpaper “LRR GRADING 3rd Supp Reb.XLS.”

**b. Culverts**

As noted previously, WFA/Basin continue to use the same culvert quantities and costs for the Orin Yard that they did in their TSO evidence. Likewise, WFA/Basin have not included the additional box culvert proposed by BNSF to provide a second means of vehicular access to the north side of the Orin Yard. However, BNSF did note several instances in which WFA/Basin’s culvert lengths were incorrect. See TS Reply Narr. at III.F-10-11. WFA/Basin’s engineers have reviewed BNSF’s corrections to the lengths of the culverts, and they agree with BNSF’s proposed changes. BNSF also noted that WFA/Basin omitted three culverts on the Canyon Subdivision. Id. at III.F-11-12. WFA/Basin’s engineers agree that those culverts should have been included, and they have added them to their TS Rebuttal culvert costs. See TS Rebuttal e-workpaper “Restated Culvert Quantities and Costs wfa3rdsupp.xls.”

**3. Track Construction**

The parties agree on the unit costs applicable to all of the various track construction items. However, BNSF made several technical corrections to WFA/Basin’s track construction cost calculations, and it included the cost to construct the Winters siding. See TS Reply Narr. at III.F-13-20. WFA/Basin’s engineers have reviewed BNSF’s technical corrections and its cost for constructing the Winters siding, and they

concur in the revisions. Thus, the parties now agree on the LRR's track construction costs.

**4. Tunnels**

The parties continue to agree on the use of the Board-approved costs for the two tunnels located on the LRR route.

**5. Bridges**

The parties agree on the unit costs applicable to all of the various bridge construction items. BNSF and WFA/Basin differ sharply with respect to the count of bridges due to BNSF's use of bridges in the Orin Yard where WFA/Basin used culverts, which is addressed in Subpart I above. For the balance of the LRR outside Orin Yard, BNSF made several other modifications to the LRR's bridge counts and designs. These modifications are addressed below.

**a. Bridge Types**

BNSF argues that WFA/Basin's bridge type classification for three new bridges added on the Valley Subdivision differs from the method that WFA/Basin used in earlier rounds of this proceeding, and which were approved by the Board in its September '07 Decision. See TS Reply Narr. at III.F-20. WFA/Basin agree that the three newly added bridges should be reclassified in the manner BNSF suggests, and it has made the necessary modifications to its TS Rebuttal bridge costs. See "LRR Bridge Costs WFA 3rd REBUTTAL.xls."

**b. Bridge Inventory**

BNSF also notes three minor errors in WFA/Basin's bridge inventory – the omission of one bridge and changes for two bridges where the number of tracks involved was incorrect. See TS Reply Narr. At III.F-21. WFA/Basin's engineers have reviewed BNSF's proposed changes and agree with the corrections.

**c. Highway Overpasses**

The parties agree on the quantities and related costs for overpasses on all portions of the LRR, except the Orin Yard. See TS Reply Narr. at III.F-23. As WFA/Basin explained above, BNSF's overpass additions to the Orin Yard are unwarranted. Consequently, WFA/Basin continue to use their TS Opening highway overpass quantities and costs.

**6. Signals and Communications**

The parties agree on the unit costs applicable to all of the various signals and communications items. However, BNSF proposed a number of minor modifications to the signals and communications design proposed by WFA/Basin's expert witness Victor Grappone. See TS Reply Narr. at III.F-24-26. WFA/Basin's Witness Grappone agrees with all of BNSF's proposed changes except one – the number of handheld radios.

BNSF proposed to increase the number of handheld radios required by the LRR employees from 342 to 346. See TS Reply e-workpaper "Third Reply Laramie River CS Spreadsheet Final.xls." The increase of four radios is attributable to the

increase in MOW employees proposed by BNSF. See TS Reply Narr. at III.F-26.

However, BNSF's addition is unwarranted. WFA/Basin's TS Opening radio count reflected the LRR staffing levels approved by the Board in its September '07 Decision.

As the number of train and engine personnel required by the LRR has declined significantly due to the reduction in the level of traffic being handled by the revised LRR, there is now a surplus of radios with which to equip up to four additional MOW employees (assuming for purposes of discussion that the additional employees are needed). The additional four radios are, therefore, unnecessary.

**7. Buildings and Facilities**

The parties agree on the building configuration and costs for all relevant facilities except for the Orin Yard site configuration costs discussed in Subpart I above. As WFA/Basin dispute most of BNSF's Orin Yard site modifications, WFA/Basin have continued to use their TS Opening building facilities costs, except as noted in Subpart I (i.e., WFA/Basin included the road to the locomotive shop proposed by BNSF and added a road between the locomotive shop and the car shop.)

**8. Public Improvements**

**a. Fencing**

The parties agree on fencing and snow fencing costs and quantities.

**b. At-Grade Crossings**

The parties generally agree on the number of at-grade crossings required. However, as explained in Subpart I above, WFA/Basin have added crossing materials for the Orin Yard tracks as required, with the quantities differing slightly from those proposed by BNSF. For other segments of the LRR, BNSF noted two crossings on the Valley Subdivision that WFA/Basin omitted. See TS Reply Narr. at III.F-28. In addition, BNSF noted a formula error in WFA/Basin's calculations that caused an understatement in the LRR's crossing costs. Id. WFA/Basin's engineers have reviewed the Valley Subdivision inventory additions and the calculation modifications proposed by BNSF, and they agree with those changes.

**c. Signs and Road Crossing Devices**

BNSF has proposed a number of minor modifications to WFA/Basin's proposed sign package. See TS Reply Narr. at III.F-29-30. WFA/Basin's engineers have reviewed and accepted BNSF revisions. Likewise, WFA/Basin accepts BNSF's modification to the sign unit costs to reflect the proper application of the Means historical factor. Id. at III.F-30.

**9. Mobilization**

The parties agree on the application of the Board-approved 3.5 percent additive for mobilization, excluding land acquisition costs and other items where the contractor's bid already included mobilization. September '07 Decision at 132.

**10. Engineering**

The parties agree on the application of the Board-approved 10 percent additive for engineering, excluding land acquisition and mobilization costs.

**11. Contingencies**

The parties agree on the application of the Board-approved 10 percent additive for contingencies, excluding land costs.

**12. Other**

**a. Construction Time Period**

In its TSO evidence, WFA/Basin continued to use the Board-approved 30-month construction period for the LRR. September '07 Decision at 107. BNSF raised no objection to this construction time period in its TS Reply evidence, and WFA/Basin continues to use it in their TS Rebuttal evidence.





### **III. G. DISCOUNTED CASH FLOW ANALYSIS**

WFA/Basin's TSO evidence addressed three DCF issues in Part III-G: cost of capital, inflation indices and tax liability. In its TS Reply evidence, BNSF accepts WFA/Basin's inflation indices and tax liability computations and procedures. In this TS Rebuttal, WFA/Basin address the parties' differing cost of capital computations.

#### **1. Cost of Capital**

The Board directed the parties to make cost of capital computations using two different procedures and to address a third alternative methodology proposed by the Board. The Board also asked the parties to submit evidence addressing which procedure the Board should apply in these supplemental proceedings.

##### **a. Computations Using The All CAPM Method**

The Board directed the parties to submit one set of cost of capital computations "showing their cost of capital calculations under CAPM." February '08 Decision at 6.

##### **i. Restated Industry Computations**

To make the required CAPM computations, WFA/Basin developed the restated rail industry cost of capital, using CAPM equity costs, for calendar years 2002, 2003, 2004 and 2005 and incorporated the Board's 2006 calculation of the industry cost of capital using CAPM. The results are summarized in TS Rebuttal Table III-G-1 below:

<b>TS Rebuttal Table III-G-1</b> <b>WFA/Basin TSO Calculations of</b> <b>Railroad Industry Cost of Equity Using CAPM</b>	
<u>Year</u> (1)	CAPM <u>Cost of Equity</u> (2)
1 2002	10.03%
2 2003	9.90%
3 2004	10.40%
4 2005	10.59%
5 2006	11.13%
Source: "2002 CAPM.xls," "2003 CAPM.xls," "2004 CAPM.xls," "2005 CAPM.xls," and 2006 Cost of Capital	

In their TSO evidence, WFA/Basin explained the detailed procedures that they used to restate the industry cost of capital using CAPM in years 2002, 2003, 2004 and 2005. See TSO Narr. at III-G-3-5. BNSF accepts WFA/Basin's computations of the rail industry's cost of equity, using CAPM, for years 2002 through 2005. See TS Reply Narr. at III.H-20 (BNSF utilizes WFA/Basin's CAPM SAC computations). BNSF also accepts WFA/Basin's use of the Board's computation of rail equity costs in 2006, calculated using CAPM. Id. at III.G-3.

**ii. Restated LRR Computations**

The parties applied WFA/Basin's calculation of the restated industry equity costs to develop composite LRR capital costs, with CAPM equity costs. The parties calculations are shown in TS Rebuttal Table III-G-2 below:

<b>TS Rebuttal Table III-G-2 Comparison of Cost of Capital Computations Using CAPM</b>		
<b><u>Year<sup>1</sup></u></b>	<b><u>WFA/Basin TSO<sup>1</sup></u></b>	<b><u>BNSF TS Reply<sup>2</sup></u></b>
2002	8.29%	8.29%
2003	7.82%	7.80%
2004	8.42%	8.42%
2005	8.24%	8.23%
2006	8.56%	8.54%
2007	8.14% <sup>3</sup>	9.44%
2008-2024	8.14% <sup>1</sup>	8.35% <sup>1</sup>
<sup>1</sup> Source: "Exhibit III-11-1.xls" <sup>2</sup> Source: "F11 DCF CAPM.xls" <sup>3</sup> Forecast		

The differences in the parties calculations of the LRR's composite cost of capital, using the CAPM equity costs, are attributable to the parties' use of a different calculation of preferred equity costs, starting in 2005; BNSF's inclusion of the Association of American Railroad's ("AAR") estimate of the rail industry's 2007 cost of equity using CAPM to calculate the LRR's 2007 equity costs; BNSF's development of a forecast LRR composite cost of equity that uses a six year average period (including

2007), not the five year period used by WFA/Basin; and BNSF's use of a different capital structure during the 2002-2004 construction period.

The Board should accept WFA/Basin's computation of the revised LRR's composite capital costs, using CAPM equity costs, not BNSF's calculations.

Specifically, the Board should not include BNSF's 2007 equity cost computations because the Board has directed the parties not to update other pertinent SAC computations for time periods after 2006. Including the 2007 equity cost computations would create a mismatch in forecast time periods. Also, the Board has not approved the 2007 AAR computations that BNSF presents to the Board and these computations are being challenged by coal shippers in the 2007 cost of capital proceedings.<sup>1</sup> BNSF's procedures also miscalculate the cost of preferred equity.

BNSF assumed the cost of preferred equity for the SARR's post-construction period, i.e., 2005 to 2024, equaled the cost of preferred equity for 2002.

WFA/Basin assumed the cost of preferred equity for the SARR's post-construction period equals the weighted average of the cost of preferred equity for 2002 through 2004.

WFA/Basin's approach is consistent with prior SAC cases where post-construction period preferred equity cost was treated in the same manner as the cost of debt and assumed to

---

<sup>1</sup> See Railroad Cost of Capital – 2007, STB Ex Parte No. 558 (Sub-No. 11), Reply Comments of Western Coal Traffic League (filed June 23, 2008).

equal the weighted-average cost of preferred equity incurred during the SARR's construction period.

Finally, BNSF based its SARR capital structure for 2002 to 2004 on the capital structure included in the STB's 2002 to 2004 cost of capital decisions.

WFA/Basin restated the capital structure to be consistent with their calculation of the CAPM cost of equity for 2002 to 2004. In the 2002 to 2004 STB cost of capital decisions, equity market capitalization was calculated based on monthly average stock prices and shares outstanding for each railroad. Under the CAPM approach, accepted by the STB in its 2006 cost of capital decision, equity market capitalization is calculated using weekly closing stock prices and shares outstanding for each railroad. Calculating the equity market capitalization using weekly data provides a more accurate answer, and the restated results should be included in the DCF.

**b. Calculations Using the Single-Stage DCF Method**

The Board also asked the parties to submit "cost-of-capital figures developed under the single-stage DCF approach." February '08 Decision at 6. The parties' computations are set forth in TS Rebuttal Table III-G-3 below:

<b>TS Rebuttal Table III-G-3 Comparison of Cost of Capital Computations Using the Single-Stage DCF Method</b>		
<u>Year<sup>1</sup></u>	<u>WFA/Basin TSO<sup>1</sup></u>	<u>BNSF TS Reply<sup>2</sup></u>
2002	9.75%	9.75%
2003	9.40%	9.40%
2004	10.11%	10.11%
2005	10.86%	10.87%
2006	9.85% <sup>3</sup>	8.54%
2007	9.85% <sup>3</sup>	9.44%
2008-2024	9.85% <sup>3</sup>	9.56% <sup>4</sup>
<sup>1</sup> Source: "Exhibit III-11-2.xls" <sup>2</sup> Source: Exhibit III-H-1 F11 OA1C.xls" <sup>3</sup> 2006 value <sup>4</sup> Forecast		

WFA/Basin utilized the LRR cost of capital figures the Board adopted in its September '07 Decision to make their single-stage DCF cost of capital computations. BNSF's calculations differ because, starting in 2005, BNSF miscalculates the cost of preferred equity; BNSF utilizes the Board's calculation of the rail industry's 2006 cost of equity (developed using CAPM) to develop the revised LRR's composite 2006 capital costs; BNSF utilizes the AAR's estimate of the rail industry's cost of equity to develop the revised LRR's composite 2007 capital costs; and BNSF develops a forecast cost of capital for years after 2007 using the average of the equity costs for years 2002 through 2007.

BNSF also departed from the Board's instructions by including CAPM calculations in the Board's single-stage DCF alternative. Also, as demonstrated above, BNSF's 2007 CAPM calculations cannot be accepted and BNSF has miscalculated the cost of preferred equity starting with its 2005 calculations.

**c. Calculations Using the Board's Hybrid Approach**

In its February '08 Decision, the Board asked the parties to comment on a hybrid approach where the revised LRR's equity costs would be calculated in 2002, 2003, 2004 and 2005 using the single-stage DCF procedures and, starting in 2006, the revised LRR's equity costs would be calculated using the Board's 2006 calculation of the rail industry's cost of equity, determined using CAPM. Id. at 6. The parties' hybrid method computations are set forth in TS Rebuttal Table III-G-4 below:



<b>TS Rebuttal Table III-G-4 Comparison of Cost of Capital Computations Using the Hybrid Method</b>		
<b><u>Year<sup>1</sup></u></b>	<b><u>WFA/Basin TSO<sup>1</sup></u></b>	<b><u>BNSF TS Reply<sup>2</sup></u></b>
2002	9.75%	9.75%
2003	9.40%	9.40%
2004	10.11%	10.11%
2005	10.86%	10.87%
2006	8.54%	8.54%
2007	8.54% <sup>3</sup>	9.44%
2008-2024	8.54% <sup>3</sup>	8.99% <sup>4</sup>
<sup>1</sup> Source: "Exhibit III-H-3.xls" <sup>2</sup> Source: "FTI CAPM 06-07.xls." <sup>3</sup> 2006 value <sup>4</sup> Average of 2006 and 2007.		

WFA/Basin's hybrid method calculations comply with the Board's instructions. WFA/Basin utilized the Board's composite single-stage DCF computations to determine the revised LRR's composite capital costs for years 2002, 2003, 2004 and 2005 and WFA/Basin also utilized the Board's 2006 determination of the rail industry's cost of equity, calculated using CAPM, to develop the revised LRR's composite capital costs for all DCF years starting in 2006.

BNSF's hybrid method calculations do not follow the Board's instructions, which call for the LRR's forecast cost of equity to equal the Board's 2006 CAPM calculation of the rail industry's cost of equity. Contrary to the Board's directions, BNSF included the AAR's estimate of the rail industry's 2007 cost of equity and it calculated a

forecast cost of capital equal to the average of the Board's 2006 rail industry equity cost computations and the AAR's estimate of the 2007 rail industry equity costs. BNSF's calculations also misstate the preferred cost of equity for the reasons set forth above. If the Board selects the hybrid method to set the revised LRR's cost of capital, it should utilize WFA/Basin's hybrid method calculations.

**d.     The Correct Approach – WFA/Basin's CAPM Calculations**

In their TSO evidence, WFA/Basin asked the Board to select the CAPM calculations to set the revised LRR's cost of capital. BNSF objects to the Board's adoption of this alternative because, it claims: (i) the Board lacks the legal authority to restate the rail industry's cost of capital for years 2002 through 2005; (ii) there is "no record support" showing that restating the revised LRR's cost of equity using CAPM in years 2002 through 2005 will produce more accurate equity costs than those the Board calculated using the single-stage DCF method; and (iii) the restatement is not supported by its two retained financial consultants (Hamada/Gokhale). See TS Reply Narr. at I-27-43 and III.G-1-4. None of these contentions has merit, WFA/Basin again request that the Board utilize their CAPM calculations to set the revised LRR's cost of equity.

**i.     Legal Authority**

WFA/Basin address and refute BNSF's legal contentions in Part I-A, above. The Board clearly has the legal authority to set the revised LRR's cost of equity in

years 2002 through 2005 as equaling the rail industry's cost of equity in each year calculated using the CAPM method.

**ii. Accuracy**

BNSF claims that there is "no record support" demonstrating that the CAPM method, applied in years 2002 through 2005, produces a more accurate calculation of the rail industry's cost of equity than application of the Board's single-stage DCF procedures in these years. See TS Reply Narr. at I-36 and III.G-3-4. BNSF's assertion simply ignores the clear showing that WFA/Basin made in their TSO evidence that application of CAPM to calculate the rail industry's cost of capital does produce the more accurate answer.

The Board held in Railroad Cost of Capital I that CAPM was a superior methodology when compared to the Board's single-stage DCF method and one that produced more accurate equity cost estimates than the Board's single-stage DCF procedure. Id. at 6. The principal reason why the Board found that the CAPM approach was superior to the single-stage DCF approach was the latter's assumption that forecasted 5-year growth rates in earnings would remain the same in perpetuity. Id. at 4. The Board found that this assumption would lead to overstated equity cost computations when growth rates were high and understated equity cost computations when growth rates were low:

The simplicity of this DCF model, however, is the result of an assumption that the 5-year growth rate provided

by the AAR will remain constant forever. But the growth rate of a particular industry can not substantially exceed the long-term growth rate of the economy indefinitely. Indeed, at the oral hearing, AAR's expert acknowledged that the current high projected 5-year growth rates cannot be sustained. Thus, when the 5-year growth rate is high, this model will overstate the cost of equity because it assumes that the growth rate will continue forever. Similarly, if the railroads experience a downturn and the predicted 5-year growth rate is very low, the model will understate the cost of equity, as the model assumes the growth rate of the railroads will forever remain below the growth rate for the national economy.

**Railroad Cost of Capital I** at 4.

In their TSO evidence, WFA/Basin applied the Board's new CAPM model to restate the rail industry's cost of capital for years 2002 through 2005. See TS Rebuttal Table III-G-1. These cost of equity calculations are clearly the most accurate calculations of the revised LRR's cost of equity because they were determined using the CAPM approach that the Board concluded is superior to the single-stage DCF model.

WFA/Basin's TSO calculations also showed that the rail industry costs of equity calculated using CAPM were substantially lower in years 2002 through 2005 than rail industry costs calculated using the single-stage DCF method in these years. These differences are summarized in TS Rebuttal Table III-G-5:

<b>TS Rebuttal Table III-G-5</b> <b><u>Comparison of Railroad Industry Cost of Equity Calculations</u></b>		
<u>Year</u> (1)	<u>CAPM Cost of Equity</u> <sup>1</sup> (2)	<u>Single-Stage DCF Cost of Equity</u> <sup>2</sup> (3)
1 2002	10.03%	12.60%
2 2003	9.90%	12.70%
3 2004	10.40%	13.16%
4 2005	10.59%	15.18%
<sup>1</sup> Source: "2002 CAPM.xls," "2003 CAPM.xls," "2004 CAPM.xls," "2005 CAPM.xls." <sup>2</sup> Source: "Exhibit_III-H-2 Reb.xls."		

WFA/Basin further demonstrated that a principal reason why the 2002 through 2005 single-stage DCF cost of equity results were substantially higher than the results obtained using CAPM was due to the very high 5-year growth rates used in the single-stage DCF procedures. As shown in WFA/Basin's TSO evidence, and repeated in TS Rebuttal Table III-G-6, these growth rates ranged from 11.00% to 13.66%.

<b>TS Rebuttal Table III-G-6</b> <b>5-Year Growth Rates Used</b> <b><u>in the STB's Single-Stage DCF Cost of Equity</u></b>	
<u>Year</u> (1)	<u>Growth Rate</u> (2)
1 2002	11.13%
2 2003	11.00%
3 2004	11.39%
4 2005	13.66%
Source: STB Cost of Capital decisions	

Obviously, the rail industry's earnings will not grow between 11% and 13% per year in perpetuity, and this assumption leads to an overstatement of the rail industry's cost of capital in these years. See TSO Narr. at III-G-9-11.

BNSF does not introduce any evidence on TS Reply disputing any of WFA/Basin's TSO calculations shown in TS Rebuttal Tables III-G-1, 4 and 5. These calculations clearly demonstrate that the Board's new CAPM procedures produce more accurate computations of the rail industry's – and the revised LRR's – cost of equity in years 2002 through 2005 than the now obsolete single-stage DCF procedures.

### **iii. Finance Experts**

BNSF includes in its TS Reply filing a verified statement from two finance experts – Hamada/Gokhale. They maintain that the Board should not restate the revised LRR's cost of equity, using CAPM, in years 2002 through 2005 because such actions could result in “decrease[d] . . . investments” in the rail industry, and could “introduce[] asymmetry into the system” that could result in the Board's use of different “micro practical inputs” into the CAPM formula than would have been used in prior years. See Hamada/Gokhale V.S. at 2. WFA/Basin includes in this TS Rebuttal the verified statement of Dr. James E. Hodder, the Charles and Laura Albright Professor of Finance at the University of Wisconsin-Madison. See TS Rebuttal Exhibit III-G-1. Dr. Hodder's TS Rebuttal verified statement responds to the TS Reply verified statement submitted by Hamada/Gokhale.

Dr. Hodder observes at the outset that the STB, like any regulatory agency, should use the best means available to it to calculate rail capital costs. Dr. Hodder confirms that the Board should use CAPM to calculate rail capital costs in this proceeding because it is a superior methodology to the Board's single-stage DCF procedure and because the single-stage DCF procedure "was yielding badly biased estimates [of rail capital costs] during the 2002-2005 time period." See Hodder V.S. at 3. Dr. Hodder also demonstrates that each of Hamada/Gokhale's tangential contentions is incorrect.

Dr. Hodder observes that it is very "unlikely" that the Board's decision in this case concerning the technical computation of the revised LRR's cost of equity would result in decreased investment in the railroad industry. Id. at 4. As the STB has observed on many occasions, "most rail rates are not subject to STB maximum rate regulation" and investors know this. See Simplified Standards at 14 n.19. Investors also know that the STB's policy is to apply what it deems to be the best and most accurate methods to develop maximum rates, and to apply these methods to historic record data. The Board's actions in Major Issues are a good example. The Board adopted new maximum rate procedures it found to be superior to prior procedures and is applying those procedures to all time periods in this case, including periods prior to the date Major Issues was decided.

Dr. Hodder also observes that even if the Board's decision to apply CAPM in this case were to cause some angst among investors, the Board must not put the interests of a group of investors ahead of the Board's, and the public's, interest in a fair

regulatory process. Hodder V.S. at 4 (“Hamada and Gokhale’s recommendation to continue using the clearly inaccurate Single-Stage DCF methodology would sacrifice accuracy, fairness, and economic efficiency in order to (hypothetically) make some group of investors better off.”).

Dr. Hodder next addresses Hamada/Gokhale’s claim that the Board would have implemented CAPM in a different way if it had addressed the matter earlier. Dr. Hodder explains that their conjecture is completely speculative in view of the attention that the Board devoted to the matter, and he observes that the changes suggested by Hamada/Gokhale would, if anything, have resulted in a still lower cost of equity for the years in question. Id. at 4-5.<sup>2</sup> Moreover, since the STB’s CAPM methodology relies exclusively on historic data, a railroad cost of equity can be calculated for almost any year in the past with relative consistency of results. All of the data inputs into the STB’s CAPM methodology are historical in nature. The risk-free rate is the historic yield-to-maturity on 20-year T-Bonds for the subject year. The railroad portfolio beta is

---

<sup>2</sup> In attempting to support their claim that the STB would not come to the same conclusion regarding which specific inputs to use in the CAPM calculations, Hamada/Gokhale cite to the debate surrounding the equity risk premium and the numerous estimates produced by different parties. See Hamada/Gokhale V.S. at 7-8. It is interesting to note that all of the references named by Hamada/Gokhale were published in or prior to 2002. Given that the STB’s cost of capital calculations operate on a one-year lag, i.e., 2002 costs are calculated in 2003, all of the referenced books and articles were available for a 2002 proceeding just as they were available in 2008 when the STB adopted its current CAPM approach. Who is to say given access to the same information, that the STB would not have come to the same conclusion?



calculated using 260 weeks of historical railroad stock prices, yields on 3 month T-Bills, and price returns on the S&P 500. The equity risk premium is based on the historic risk premium from 1926 as reported by Morningstar, Inc.

Finally, Professor Hodder addresses and refutes Hamada/Gokhale's contention that use of a CAPM-based cost of equity for 2002-2005 somehow would introduce unwarranted asymmetry or "chaos" into the regulatory process because only "select" litigants could ask the Board for this relief, and he explains that the contention is unwarranted. As Dr. Hodder correctly explains, the Board informed the United States Court of Appeals for the D.C. Circuit that the Board was legally required to consider claims made by shippers in pending rate cases that CAPM should be applied to set capital costs. See TSO Narr. at I-19-20. Deciding issues in pending cases does not produce any impermissible "asymmetry" here, the Board is simply carrying out its legal responsibilities to decide pending cases in accordance with the law.

Nor does a case-by-case approach introduce "chaos," as Hamada/Gokhale contend, as the case-by-case approach is one long-used by the STB; the number of rate cases raising restated industry cost of capital costs is small (just this case and AEP Texas); and the issue is likely to be moot in future cases where it is most likely that SARR construction periods will start in 2006 (or later), i.e., time periods where CAPM costs will apply. Hodder V.S. at 5-6.

**e.     **The Next Best Approach – WFA/Basin’s  
Hybrid Method Calculations****

If the Board does not select the CAPM method to calculate the revised LRR’s cost of equity, it should select WFA/Basin’s hybrid method calculations as the next best alternative for the reasons set forth in WFA/Basin’s TSO evidence. This alternative mistakenly keeps in place overstated single-stage DCF equity costs in years 2002 through 2005, but mitigates this overstatement, in part, by applying the CAPM method to set the LRR’s cost of equity in years after 2005. See TSO Narr. at III-G-11-12.

BNSF does not raise any legal objections to the Board’s adoption of this hybrid method, but asks the Board not to adopt it because the approach constitutes a departure from the Board’s prior practice of setting SARR forecast equity costs using an average of prior year’s historical data. Of course, the Board’s prior practice took place in cases decided before the Board adopted CAPM. Now that the Board has adopted CAPM, and concluded that it will no longer use the single-stage DCF procedure, it makes no sense for the Board to calculate forecast LRR equity costs using the now obsolete single-stage DCF procedure. Those costs should be forecasted using the same method the Board will apply to determine industry equity costs in future years – CAPM.

BNSF also claims the Board’s notice in Railroad Cost of Capital III supports the use of single-stage DCF equity costs to forecast the revised LRR’s equity costs. In Railroad Cost of Capital III, the Board is seeking comments on whether to supplement its CAPM procedure for determining the railroad industry’s cost of equity

with a multi-stage DCF analysis. The Board has not determined whether it will adopt a multi-stage DCF procedure and whether the Board will do so remains an open question. The issue now before the Board is how to set the revised LRR's forecast cost of equity. The Board should do so using the best methodology available to it at the time it makes its decision – and that methodology is CAPM.

Moreover, the Board reaffirms in Cost of Capital III that its “aging single-stage DCF model” had a major flaw – its reliance on the “assumption that the 5-year growth rate would remain constant thereafter.” Id. at 3 (“While it is certainly possible that railroad earnings will continue to grow rapidly for many years, they cannot do so *forever* as the single-stage DCF model assumes.”). The Board should not skew its calculation of the revised LRR's forecast cost of equity by basing those equity costs on an outdated and flawed methodology.

Even the railroads' industry experts conceded in Cost of Capital that the single-stage DCF method should not be used to forecast the rail industry cost of equity after 2005. See Cost of Capital II at 7 n.12 (“[N]one of AAR's finance experts continues to recommend that we continue using a single-stage DCF model.”).



### **III. H. RESULTS OF SAC ANALYSIS**

#### **1. DCF Analysis**

WFA/Basin present TS Rebuttal DCF models that incorporate the changes to the revised operating and construction costs discussed in Parts III-B through III-F. The DCF model used to develop TS Rebuttal stand-alone costs for the LRR, with the LRR's equity costs determined using CAPM for all time periods, is set forth in TS Rebuttal e-workpaper "Exhibit\_III-H-1 Reb.xls." The DCF model used to develop TS Rebuttal stand-alone costs for the LRR, with the LRR's equity costs determined using the single-stage DCF approach, is set forth in TSO e-workpaper "Exhibit\_III-H-2 Reb.xls." The DCF model used to develop TS Rebuttal stand-alone costs for the LRR, with the LRR's equity costs for 2002-2005 determined using the single-stage DCF approach and for 2006 and beyond using the CAPM approach, is set forth in TSO e-workpaper "Exhibit\_III-H-3 Reb.xls."

#### **2. DCF Results**

The results of WFA/Basin's TS Rebuttal DCF calculations, using CAPM to determine the LRR's cost of equity in all time periods, are summarized in TS Rebuttal Table III-H-1:

<b>TS Rebuttal Table III-H-1</b> <b><u>Discounted Cash Flow Analysis</u></b> <b>(\$ millions)</b>					
<b><u>Period</u></b>	<b><u>LRR SAC Cost</u></b>	<b><u>LRR Revenues</u></b>	<b><u>Overpayments In Revenues</u></b>	<b><u>Present Value Difference</u></b>	<b><u>Cumulative Difference</u></b>
4Q04	\$ 46.1	\$ 58.3	\$ 12.2	\$ 12.2	\$ 12.2
2005	189.6	236.8	47.2	44.4	56.6
2006	193.1	250.6	57.5	49.8	106.4
2007	196.6	259.7	63.1	50.9	157.3
2008	199.6	262.3	62.7	46.8	204.0
2009	206.6	274.2	67.5	46.6	250.6
2010	209.7	277.0	67.3	42.9	293.5
2011	212.9	281.9	69.0	40.7	334.2
2012	217.0	287.9	70.9	38.7	372.9
2013	221.8	294.7	72.8	36.7	409.6
2014	226.4	299.8	73.4	34.2	443.8
2015	229.3	299.1	69.8	30.1	473.9
2016	235.0	307.4	72.3	28.8	502.8
2017	241.8	319.1	77.2	28.5	531.2
2018	247.9	330.4	82.5	28.1	559.4
2019	253.5	339.4	85.8	27.1	586.4
2020	259.5	348.8	89.3	26.0	612.5
2021	265.6	359.5	93.9	25.3	637.8
2022	271.6	368.2	96.6	24.1	661.9
2023	277.7	378.4	100.7	23.2	685.1
1Q-3Q2024	212.4	291.9	79.5	17.3	702.3

### **3. LRR SAC Rates**

In their TSO evidence, WFA/Basin allocated the total SAC costs to members of the LRR traffic group using the Board's MMM procedures ("MMM").

WFA/Basin continue to do so in their TS Rebuttal evidence. WFA/Basin's TS Rebuttal

MMM calculations are set forth in TS Rebuttal e-workpaper “MMM Model Linked to III-H-1 Reb.xls” and summarized in TS Rebuttal Exhibit III-H-1.<sup>1</sup>

In its TS Reply evidence, BNSF requests that the Board radically alter the MMM procedure the Board adopted in Major Issues. Specifically, BNSF requests that the Board reduce the R/VC ratios on the revised LRR’s internally rerouted traffic to 0.88. Secondly, BNSF requests that the Board reduce the R/VC ratios on what BNSF calls “short haul” traffic, which results in the issue traffic’s R/VC ratios being reduced by approximately 53%.<sup>2</sup>

**a. Rerouted Traffic Adjustment**

WFA/Basin addressed BNSF’s reroute adjustment in Part III-A. As discussed in detail in Part III-A, BNSF proposes the reroute adjustment to correct for

---

<sup>1</sup> The TS Rebuttal Exhibit III-H-1 MMM results use CAPM to determine the LRR’s cost of equity in all time periods. The MMM results for WFA/Basin’s two other DCF models are shown in WFA/Basin TS Rebuttal e-workpapers “MMM Model Linked to III-H-2 Reb.xls” and “MMM Model Linked to III-H-3 Reb.xls.”

<sup>2</sup> See TS Reply e-workpaper “MMM Implementation Example.xls.” BNSF also objects to WFA/Basin’s use of CAPM to calculate the 2005 base year MMM variable costs in two of their three DCF analyses. WFA/Basin address CAPM issues in Parts I-A and III-G. WFA/Basin note that the use of URCS variable costs developed using the 2004 single-stage DCF cost of capital or the 2004 CAPM cost of capital has no impact on the resulting maximum prices of the issue traffic, holding all else constant. For example, WFA/Basin TS Rebuttal e-workpaper “MMM Model Linked to III-H-1 Reb with SSDCF VC.xls” calculates the maximum rates in 4Q 2004 using the revenues and SAC developed using CAPM in all periods, but substitutes variable costs developed using the 2004 single-stage DCF cost of capital. The results show that while R/VC ratios change, the final MMM rate is the same in both cases. This is because all variable costs are changed in the same proportion.

WFA/Basin's asserted gaming of ATC and MMM. The Board should not consider this adjustment because it constitutes an impermissible collateral attack on the MMM and ATC procedures the Board adopted in Major Issues. Moreover, WFA/Basin did not engage in any gaming. BNSF's rerouted traffic adjustment is simply an arbitrary exercise designed to substantially advance BNSF's litigation agenda by substantially reducing the revised LRR's revenues.

**b. Length of Haul Adjustment**

WFA/Basin calculated the R/VC ratios for the issue traffic, and for each member of the revised LRR's traffic group, following the procedures set forth in Major Issues. Those procedures call for the calculation of R/VC ratios for each SARR traffic group member for each year in the DCF model. The revenues in this calculation equal the SARR revenues for each traffic group member. The variable costs equal the on-SARR variable costs (calculated using BNSF's URCS costs) for each traffic group member.

BNSF does not dispute that WFA/Basin followed the procedures the Board adopted in Major Issues to calculate MMM R/VC ratios. BNSF instead maintains that the MMM procedures the Board adopted in Major Issues are "flawed" and need to be significantly changed when applied in a case brought by a shipper with a "short haul." TS Reply Narr. at III.H-9-17. BNSF proceeds to propose a complex mathematical procedure that is designed to significantly reduce the R/VC ratios on the issue traffic, and, as a



result, significantly reduce the rate relief to which WFA/Basin are entitled under the Board's MMM procedures. Id. at III.H-12-17, 20.

BNSF's length of haul adjustment should be rejected for the same reasons the Board should reject its rerouted traffic adjustment – the Board said in Major Issues it would not entertain parties' requests to make fundamental changes in the rules it adopted (including MMM); the predicate reasons for BNSF's attack on MMM are baseless; and its proposed adjustment procedure is riddled with methodological errors.

**i. Changes in Individual Cases**

The Board promulgated four new SAC rules in Major Issues, including MMM. The Board adopted MMM to “settle” the “contentious” issue on how to allocate maximum rate relief within the SARR. See id. at 3. Specifically, the Board “replaced the ‘percent reduction’ approach with the maximum markup methodology.” Id. at 1. The Board found that MMM solved the problems inherent in percent reduction; was “relatively simple” to apply; and would permit parties to “predict the outcome of their own disputes.” Id. at 15, 12.

The Board also considered and rejected requests that parties be permitted to present alternative procedures in an individual case to allocate maximum relief. The Board found that permitting the use of alternative methodologies “would defeat much of the purpose of this rulemaking – to simplify and standardize our procedures in SAC cases” and would permit the parties in individual cases to “select whatever approach”

they thought would give them the best result in an individual case. Id. at 23. The Board concluded “[w]ith respect to replacing the percent reduction approach, it is important that the agency apply a uniform approach . . . .” Id. at 76.

Major Issues precludes the Board from considering BNSF’s length of haul adjustment. The adjustment, described in more detail below, results in a methodology that bears no resemblance whatsoever to the MMM procedure the Board adopted in Major Issues; is designed solely to produce the outcome BNSF wants (little or no relief for WFA/Basin); and would defeat the Board’s goal of “settling” the maximum rate procedure in a manner that allows shippers to predict outcomes.<sup>3</sup> If allowed to stand, the Board can expect in subsequent cases that both shippers and carriers will feel compelled to start making wholesale “adjustments” to MMM to favor their litigating positions. WFA/Basin followed the Board’s MMM procedure as set forth in Major Issues and should not be penalized for doing so.

## **ii. Rationale**

BNSF claims that MMM is flawed and the MMM procedures should be radically changed by implementing a length of haul adjustment because: (a) the Board did not “consider” the issue of whether MMM should apply in cases where the traffic group consists of long-haul traffic and short-haul traffic; (b) a length of haul adjustment is needed to maintain differential pricing in the traffic group; (c) short-haul traffic is not as

---

<sup>3</sup> See Major Issues at 12.

profitable as long-haul traffic on a per ton basis; (d) short-haul PRB traffic movements displace more profitable long-haul movements; and (e) MMM “punishes” railroads for carrying short-haul traffic. TS Reply Narr. at III.H-9-17. All of these assertions are demonstrably wrong.

**(a) STB Consideration**

In its Major Issues NPRM, the Board proposed two new maximum rate procedures – MMM and a methodology called the Maximum Contribution Methodology (“MCM”). MCM called for use of a similar procedure to MMM, but the benchmark used in the MCM analysis was rates per ton-mile. The Board specifically noted that the MMM approach would be better “suited where the traffic group is diverse, such as where it is comprised of both short-haul and long-haul traffic” because MMM would account for “the differing cost structures per ton-mile.” Major Issues NPRM at 13.

The Board proceeded to adopt the MMM approach because it found it to be a more refined approach than MCM and one that was consistent with Congressional directives. See Major Issues at 14 (“Congress regarded R/VC ratios as an appropriate measure for allocating joint and common costs among rail shippers, as reflected in the 180% R/VC jurisdictional floor for rate relief.”). Thus, contrary to BNSF’s assertions, the Board did consider the propriety of including long-haul and short-haul traffic in the MMM procedures and decided, consistent with Congressional intent, to utilize R/VC ratio

benchmarks reflecting market rates the carrier was collecting on all traffic group moves – both long and short.

**(b) Demand-Based Pricing**

BNSF claims that a mileage adjustment is necessary to properly reflect differential pricing within the SARR traffic group. See TS Reply Narr. at III.H-12. BNSF's principal thesis here is that it imposes rates with higher R/VC ratios on short-haul traffic than it imposes on long-haul traffic, and that this market-based form of differential pricing should be accounted for by modifying MMM to preserve the asserted higher relative margins BNSF claims it receives on short-haul traffic. BNSF's thesis here guts MMM. The purpose of MMM is to allocate rate relief to traffic group shippers with relatively low demand-elasticity (and high R/VC ratios), while leaving the rates of shippers with relatively high demand-elasticity (and low R/VC ratios) unadjusted. Major Issues at 20-23. Thus, MMM was designed to provide a methodology focusing on reducing rates paid by shippers with low elasticities of demand, as reflected in the R/VC ratio calculation. BNSF asks the Board to adopt a perverse adjustment to MMM where *the most demand inelastic traffic does not obtain the most relief.*

**(c) Profitability of Short-Haul Movements**

BNSF posits that while short-haul movements may have high R/VC ratios, the mileage adjustment must still be applied because short-haul movements are not very profitable for railroads, and railroads would be better off transporting long-haul

movements with lower R/VC ratios. BNSF uses a simplistic example in an attempt to support its hypothesis:

For a railroad such as BNSF seeking to price its services efficiently in accordance with shipper demand, the absolute amount of contribution available on a given movement can be substantially greater on a long-haul movement than on a short-haul movement, even if the R/VC on the short-haul movement is higher. For example, the contribution on a relatively long-haul movement that incurs variable costs of \$10 per ton and is priced at \$20 per ton is \$10 per ton; whereas the contribution on a relatively short-haul movement that incurs variable costs of \$3 per ton and is priced at \$9 per ton is only \$6 per ton. The short-haul movement exhibits a higher R/VC ratio (300 percent) than the long-haul movement, but results in \$4 per ton less in contribution.

See TS Reply Narr. at III.H-10-11.

BNSF's simplistic example fails to take into consideration absolute levels of contribution due to differences in operating conditions and shipment volumes. For example, assume that the cost figures in BNSF's example roughly approximate movement length disparity between the moves, and that the longer movement is more than three (3) times the length of the shorter movement. Further assume both shippers in the example have optimal equipment configurations such that their train-sets cycle continually. Further, very conservatively assume that the train moving in service to the closer plant makes a turn twice as often as the train moving in service to the more distant plant. Under these conservative assumptions the train moving in service to the closer plant

moves twice as many tons in the same time period as the train moving in service to the more distant plant.<sup>4</sup> The result is shown in TS Rebuttal Table III-H-2 below.

<b>TS Rebuttal Table III-H-2</b> <b><u>Actual Contribution Potential For Short-Haul and Long-Haul Movements</u></b>		
<u>Item</u>	<u>Shorter Movement</u>	<u>Longer Movement</u>
(1)	(2)	(3)
1. Movement Rate (\$/ton)	\$9 00	\$20 00
2. Movement VC (\$/ton)	\$3 00	\$10 00
3. Movement Contribution (\$/ton)	\$6 00	\$10 00
4. Movement Length (miles)	300	1,111
5. Cycle Time (days)	3.5	7
6. Trips per week	2	1
7. Contribution Per Week	\$12 00	\$10 00

TS Rebuttal Table III-H-2 demonstrates that while the short-haul movement may have a lower contribution per ton, when timing and efficiency are taken into consideration, the shorter movement is more profitable for the railroad.

BNSF's example also fails to take into consideration the amount of coal being transported by each party. If the shorter movement is transporting 5 million tons per year, it would have a total contribution of \$30 million per year (\$6 per ton contribution x 5 million tons). Assume the longer movement, which has a contribution of \$10 per ton, transported 2 million tons per year. Its total contribution of \$20 million is

---

<sup>4</sup> Alternatively, the shorter movement earns more than 50% of the longer movement in one-half the time.

\$10 million less than that contributed by the shorter movement.<sup>5</sup> Thus, BNSF's simple analysis fails to support its conclusion that higher R/VC ratios are attributable to lower contributions.

**(d) Opportunity Costs**

BNSF asserts that it incurs an opportunity cost every time it loads a short-haul movement, which forces it to charge higher relative rates on these moves. According to BNSF, this is because mine loading slots in the PRB are a finite and limited resource, and BNSF's common carrier obligation requires it to give away this limited resource at a low margin. See TS Reply Narr. at III.H-11. In BNSF's opinion, this creates an opportunity cost that the railroad must somehow attempt to recover.

Again, BNSF's argument is without merit. As discussed above, BNSF completely ignores the value of time and volume when it comes to calculating absolute contributions for each movement, and thus oversimplifies the issue. When the profit from the "low-margin" traffic can be earned in a relatively short time frame (as in the case of WFA/Basin and other short-haul coal traffic), the railroad is able to put the resources used to earn that profit back into service to earn more profit on other movements. In contrast, "higher yield" traffic that ties up railroad and/or shipper equipment for days or weeks (as

---

<sup>5</sup> This assumes that the railroad could only chose one shipper or the other, and not take all of the longer movement's traffic and only a portion of the shorter movement's coal.

is the case with many long-haul coal shippers) limits the total profit the railroad can earn using that equipment over time.

Furthermore, BNSF's assertion that it incurs opportunity costs when it loads a so-called low-margin train is only true if higher-margin traffic is displaced. BNSF did not provide any support that low-margin, short-haul movements are displacing higher-margin traffic at PRB coal mines, or that demand is out-stripping current capacity at PRB mines.<sup>6</sup>

In any event, BNSF's common carrier obligation does not require it to displace high absolute contribution traffic for low contributing traffic. BNSF's common carrier obligation, under 49 U.S.C § 11101, only requires BNSF to provide common carrier service upon "reasonable request." To argue that short-haul shippers are incurring higher rates due to a railroad's common carrier obligation requires an unsupported leap in logic and the law.

Finally, BNSF fails to consider that rates determined under MMM are a function of R/VC and the cost of providing service. Because the adjustment mechanism for rate setting under MMM is a ratio and not an additive amount, it already inherently

---

<sup>6</sup> Independent, not-for-litigation studies, show that there are, and will be "no significant rail capacity constraints" in the PRB transportation corridor "because of the volume and profitability of the market." WFA/Basin Reply Narr. at IV-9 (quoting the influential study prepared by the American Association of State Highway and Transportation officials, entitled "Transportation - Invest in America, Freight-Rail Bottom Line Report").



accounts for the relative cost of short-haul traffic because on a per-mile basis, short-haul movements have higher variable costs. Applying a constant R/VC factor to these costs results in a higher absolute per-mile mark-up for short-haul movements, reflecting their inherently higher relative costs. This can best be demonstrated through the use of a simple illustration included in TS Rebuttal Table III-H-3 below.

<b>TS Rebuttal Table III-H-3</b> <b>Illustration Of The Differing Demand-</b> <b>Elasticities Reflected In The R/VC Adjustment</b>		
<u>Item</u>	<u>Shorter</u> <u>Movement</u>	<u>Longer</u> <u>Movement</u>
(1)	(2)	(3)
1 Movement Length (miles)	300	1,111
2 Variable Cost Per Ton	\$3 00	\$10.00
3 Variable Cost Per Ton-Mile	10 0 mills	9.0 mills
4 Rate Per Ton at 180% VC	\$5 40	\$18 00
5 Rate Per Ton-Mile at 180% VC	18 0 mills	16 2 mills
6 Contribution Per Ton-Mile at 180% VC	8.0 mills	7 2 mills

As is shown in TS Rebuttal Table III-H-3 above, while the shorter movement, with a movement length of 300 miles, has a lower rate per ton than the longer movement, its variable costs on a mills per ton-mile basis are higher. When a standard R/VC mark-up is applied to the two movements' variable costs, as in the MMM process, the shorter movement has a higher per-mile mark-up than the longer movement. Any opportunity cost, if one even exists, is recovered by the shorter movement's higher per ton-mile contributions.

**(e) Punishment Contentions**

BNSF asserts that because short-haul movements allegedly have higher R/VC ratios than longer-haul movements, application of the MMM without a length of haul adjustment could be expected to “punish” a railroad simply because of the length of the movement. See TS Reply Narr. at III.H-12. Under BNSF’s logic, this “punishment” arises because MMM caps rates with the same R/VC ratios without considering length of haul thereby eliminating an important dimension of differential pricing. See TS Reply Narr. at III.H-14. The foundation of BNSF’s assertion is built in part on BNSF’s claims that short-haul movements have higher relative rates, and consequently higher R/VC ratios because of the need for higher contributions and the presence of opportunity costs. As detailed above, these two arguments are without merit.

BNSF also states that short-haul movements have higher R/VC ratios than the R/VC ratios on longer movements because railroads face greater geographical and product competition on longer coal movements. BNSF offers no evidence on this point, and, in any event, the point is irrelevant to BNSF’s argument that MMM punishes short-haul movements and caps R/VC ratios at a common level. Maximum reasonable rate cases are not about rewarding or punishing railroads, they are about protecting shippers with inelastic demand and no competitive options from monopoly pricing. BNSF’s claim that MMM somehow punishes the railroad misses the point that the STB’s MMM approach was not designed to produce a specific result in any particular case. Certainly

both parties can point to specific data points where the application of any model produces results that vary somewhat from those observed in the real world – such is the nature of modeling. However, MMM, as conceived by the STB and as applied by WFA/Basin in this case is the methodology that the STB determined maintains railroads' rights to differentially price, while protecting captive shippers from unreasonable rates.

The STB clearly stated in Major Issues that MMM allows for demand-based differential pricing by railroads, while also addressing the “Long-Cannon factors” that posit that a carrier must charge its competitive traffic as much of the unattributable costs as the demand will permit. See Major Issues at 16, 20. MMM achieves both of these results in this case. If BNSF's assumption is true that long-haul traffic is more competitive than short-haul traffic due to product and geographic competition, then, under the Long-Cannon factors, a railroad must charge these movements the most that demand will permit before asking short-haul movements to contribute a greater share towards unattributable costs. The Long-Cannon factors are accommodated in the MMM process by assigning each movement an R/VC ratio up to, but no higher than, its actual R/VC ratio. In this way, low R/VC ratio movements are contributing the maximum amount their demand elasticity allows.

At the same time, the MMM process maintains differential pricing. As the STB explained in Major Issues:

The maximum R/VC rate ceiling under the Maximum Markup Methodology reflects a limit on the amount of differential

pricing permitted. If the collective revenue the railroad earns from the traffic group is insufficient to provide a reasonable return on its investment, then the carrier may engage in full demand-based differential pricing. However, once it has reached the point where it is earning a reasonable return on investment from the selected traffic group, the Maximum Markup Methodology would restrain the degree of differential pricing permitted. The carrier could engage in enough demand-based differential pricing to earn adequate revenues, but no more. This demand-based approach adheres to the important principle that captive shippers should not be required to continue to pay differentially higher rates than other shippers when some or all of that differential is no longer necessary to ensure a financially sound carrier capable of meeting its current and future service needs.

Major Issues at 20-21 (internal quotations and citations omitted).

BNSF's primary objection in this case is not that MMM does not allow for differential pricing, but rather, that under the MMM approach, BNSF is not allowed to continue to charge monopoly prices on a very demand inelastic movement after all SAC have been recovered. This is not punishment, but the end result of effective rate regulation.

### **iii. Detailed Procedures**

BNSF's technical theories and procedures for developing and applying its length of haul adjustment are also riddled with errors. The specific problems are addressed below.

**(a) Regression Analysis**

To quantify the alleged difference between R/VC ratios on short-haul and long-haul movements, and to provide data to manipulate the MMM process, BNSF developed a regression analysis to attempt to link the level of a movement's R/VC ratio to its length of haul, its captive/competitive status, and its annual volume. Specifically, BNSF performed an ordinary least squares ("OLS") regression using each generating station's weighted average R/VC ratio for BNSF PRB coal movements as the dependent variable. For the independent variables, BNSF used the inverse of the weighted average distance to each destination station, a "dummy variable" for captive/competitive status, and a "dummy variable" for traffic volume.<sup>7</sup> BNSF states that its regression coefficients were statistically significant at the 95% confidence level, and also claims that the regression's Durbin-Watson statistic confirms that autocorrelation is at acceptable levels. See TS Reply Narr. at III.II-13.

WFA/Basin have reviewed BNSF's results and they agree that the regression output shows coefficients which are significant at the 95% confidence level and that the Durbin-Watson statistic indicates autocorrelation is not an issue.<sup>8</sup> However,

---

<sup>7</sup> See TS Reply Narr. at III.H-12 and III.H-13. BNSF euphemistically terms captive shippers as "sole-served" shippers in its analysis. For this TS Rebuttal, WFA/Basin uses the proper term of "captive shippers."

<sup>8</sup> BNSF did not include its Durbin-Watson statistic in its evidence or workpapers. WFA/Basin's rerunning of BNSF regression in MINITAB statistical software produced a Durbin-Watson statistic of 2.22, which means the hypothesis of no autocorrelation can be accepted at the 95% confidence level.

simply looking at the coefficient's p-values included in the standard regression output does not validate the regression. One must also check that the standard assumptions of multiple regression also hold, or else the justification for the use of an OLS can be invalid.

Multiple regression models, such as the model developed by BNSF, rest upon some basic assumptions. Validation of these assumptions is what allows statistical inference to be used in the model. If any of these assumptions are invalid, results from the application of the model are seriously in doubt.<sup>9</sup> The standard OLS assumptions are:

1. The data included in the OLS are fixed numbers or are random variables which are independent of the error terms;
2. The error terms are random variables with a mean of zero (0);
3. The errors are homoscedastic, i.e., all have the same variance;
4. The errors are not correlated with each other; and
5. The errors are normally distributed.

The first assumption is not a concern in this instance given the fixed nature of the input data. WFA/Basin's rerunning of BNSF's regression indicated that the mean of the error terms equaled zero and were homoscedastic confirming the second and third assumptions, respectively. Finally, the Durbin-Watson statistic discussed above confirms the fourth assumption of no autocorrelation.

---

<sup>9</sup> See Paul Newbold, Statistics for Business and Economics 523 (3d ed. 1991) and National Institute of Standards, Engineering Statistics Handbook § 5.2.4.5 ("NIST Handbook").

BNSF's regression model did show a problem with the fifth assumption. Namely, inspection of the error terms showed strong statistical evidence that they are not normally distributed. WFA/Basin have included the TS Rebuttal e-workpaper "Test of BNSF R-VC Regression Analysis.MPJ," which is an analysis of BNSF's regression error terms. WFA/Basin performed three separate tests of normalcy to determine if the error terms failed the normality assumption.<sup>10</sup> Two of the three tests had "p-values" of greater than 0.10, while the third test developed a p-value of 0.045. While one of the results was significant at the 95% level, two others tests were not even significant at the 90% level. This casts serious doubt on the underpinnings of BNSF's model and its results.

The assumption of normality is critical in the application and validation of the regression model. The normality assumption is what justifies the use of the Student's t distribution in the evaluation of the coefficients, and the use of the F distributions in the analysis of variance. In other words, the normality assumptions are necessary for hypothesis tests and the development of confidence intervals. If the normality assumption is violated, as is strongly indicated by the results of two of the three normality tests, then BNSF's claims about the statistical significance of the regression coefficients and their use is effectively moot.

---

<sup>10</sup> Specifically, WFA/Basin ran the Anderson-Darling Normality Test, Kolmogorov-Smirnov Normality Test, and the W-Test for Normality. WFA/Basin also developed a histogram of the error terms. See TS Rebuttal e-workpaper "Test of BNSF RVC Regression Analysis.MPJ."

**(b) Regression Application**

BNSF argues that the MMM process must be modified to recognize the differential pricing characteristics established by market forces, which are lost as part of the standard MMM procedure. See TS Reply Narr. at III.H-14. According to BNSF, this modification involves “normalizing” each movements’ R/VC ratio so that rates are not simply reduced because of the short length of the movement. BNSF’s so-called normalization process involves six primary steps:

1. First, using the data from the regression model discussed above and what it claims is the median movement miles of 1,111 miles for the SARR traffic group from WFA/Basin’s Opening evidence, BNSF developed four (4) “benchmark” R/VC ratios: (i) a captive, high volume R/VC; (ii) a captive, low volume R/VC; (iii) a competitive, high volume R/VC; and (iv) a competitive, low volume R/VC.<sup>11</sup>
2. BNSF developed a “normalization” ratio for each movement by first estimating the movement’s “normalized” R/VC ratio based on its overall distance, captive/competitive status and volume status, and then dividing the plant’s normalized R/VC ratio by the benchmark R/VC ratios in the same category.<sup>12</sup>

---

<sup>11</sup> BNSF’s low volume dividing line is based on whether the plant received more or less than 2 million tons in the aggregate for the year of BNSF PRB delivered coal.

<sup>12</sup> For example, on the movement from the Antelope Mine to the LRS, BNSF first calculated the movement’s normalized R/VC ratio using the movement’s 112 mile haul and the coefficients developed in its regression model. This produced a normalized R/VC ratio of 387% for the movement from Antelope to LRS compared to the movement’s actual R/VC ratio of 590% in 1Q05. BNSF then divided the normalized R/VC ratio of 387% by the benchmark R/VC ratio for captive, large volume shippers of 157% to develop a normalization ratio of 2.46. See TS Reply e-workpaper “MMM Implementation Example.xls.” For all movements with real world length of haul less than 1,111 miles, this produces a ratio greater than one (1), and for all movements with length of haul greater than 1,111 miles a ratio less than one (1).



3. BNSF then restated each movement's variable costs by multiplying the movement's actual URCS Phase III variable costs by the normalization ratio developed in step 2. This effectively inflates the variable costs for movements with length of haul less than the median 1.111 miles and deflates the variable costs on movements greater than the alleged median.
4. BNSF divides each movement's SARR revenues by its normalized SARR variable costs to develop a normalized R/VC ratio, which it uses to adjust rates in the MMM model.
5. After completing the MMM process and identifying each movements' final MMM R/VC ratio, BNSF "translates" each movement's normalized final MMM R/VC ratio back into an actual R/VC ratio. BNSF does this by multiplying the post-MMM normalized R/VC ratio by the normalization ratio calculated for the movement in step 2 above.
6. Finally, rate reductions are developed for each movement based on its "re-translated" final MMM R/VC ratio and variable cost.

BNSF's normalization process is really nothing more than a long, convoluted process to unjustifiably change URCS Phase III variable costs in the MMM model. Besides its blatant attempt to manipulate the MMM process, BNSF's approach fails for five other reasons as well. First, the regression equation on which it relies does not control for all factors that collectively determine movement-specific demand elasticity. Second, BNSF's calculation of the median movement mileage is erroneous. Third, BNSF improperly extrapolates its regression results to the MMM model data. Fourth, BNSF improperly adjusts the URCS Phase III variable costs used in the MMM Model. Fifth, BNSF's normalization adjustment violates the Long-Cannon factors discussed supra.

Each of these five failure factors is discussed below.

**(i) Regression Controls**

BNSF justifies its normalization methodology by asserting that not including the adjustment is to remove the “important dimension of differential pricing” from the rail transportation market. See TS Reply Narr. at III.H-14. Contrary to this assertion, application of BNSF’s normalization procedure serves to smooth out peaks and valleys observed in the market which reflect actual variation in demand elasticities among shippers, and fails to account for all of the variability.

BNSF proposes a one-size-fits-all adjustment which restates the R/VC ratios for all coal shippers based on an analysis that only considers three factors. Conversely, actual shipper R/VC ratios reflect all factors that determine each shipper’s demand elasticity in the real world. For example, while two shippers may have equal lengths of haul, equal access to rail competition, and move similar volumes, it does not mean they have identical demand elasticities. Other factors come into play including, but not limited to, plant location, availability of substitute products, and capacity and competitive status at other utility-owned stations. Each of these additional factors can have a significant impact on a movement’s rate and R/VC ratio. For example, BNSF’s regression analysis indicates that 66.8% of the change in R/VC ratio is due to length of haul, captivity and volumes. However, this means that nearly one-third of the difference

in R/VC ratios is due to factors not considered by BNSF.<sup>13</sup> Such a sizeable unknown factor clearly distorts BNSF's approach.

BNSF's normalization procedure is also completely contrary to its argument in opposition to the RAM methodology raised during the Major Issues proceedings when it stated that it is improper to group individual movements for purposes of rate-setting.<sup>14</sup> There BNSF contended that there are many factors which collectively determine movement-specific demand elasticities, and which collectively determine the market rates and R/VC ratios of each movement on an individual basis. Now, in this proceeding, BNSF reverses course, saying it is not only appropriate, but necessary to group shippers for the purpose of rate-setting – "normalizing" the market data and restating all R/VC ratios on a comparable basis. BNSF's made-for-litigation change of position should, therefore, be rejected.

#### (ii) Median Mileage

Apart from its theoretical shortcomings, BNSF's analysis is mechanically flawed in its derivation and application of its regression equation. Specifically, BNSF

---

<sup>13</sup> Regressing distance alone against R/VC ratios produces an adjusted R-Squared of 44%, which means 56% of the difference in R/VC ratio is attributable to factors other than distance. Similarly, regressing R/VC ratios against captive status produces nearly the same results as distance alone with an adjusted R-squared of 43%. The amount of traffic has very little impact on R/VC ratios producing an adjusted R-Squared of 3%.

<sup>14</sup> Specifically, BNSF opined that it would be incorrect to apply the same rate-setting mechanism for all "captive" and "competitive" movements because there are multiple other factors that influence demand elasticity.

stated that its expert, Mr. Klick, determined the median distance for all movements in the sample (i.e., 1,111 miles and used that distance to calculate the benchmark R/VC ratios).  
See TS Reply Narr. at III.H-14-15.

BNSF's selection of the so-called median movement for this traffic group is erroneous. Mr. Klick simply arrayed all the movements from WFA/Basin's original SARR traffic group by total movement distance and selected the movement in the middle of the list. Mr. Klick completely ignored the fact that each movement represents a unique volume of tons shipped. In actuality, 54.5% of the tons included by Mr. Klick in his analysis moved more than 1,111 miles. The true median length of haul for the traffic group analyzed by BNSF is 1,129 miles (50% of the tons moved 1,129 or fewer miles and 50% of the tons moved 1,129 or more miles).

**(iii)    Extrapolation of  
Regression Results**

As discussed above, BNSF developed its regression analysis using weighted-average milage and R/VC ratios for each plant, excluding the LRS, included in WFA/Basin's Opening traffic group. This is different than the traffic data used in the MMM model in WFA/Basin's TSO evidence.<sup>15</sup> For example, BNSF's workpapers show that the weighted-average R/VC used in its regression model ranged from 81% to 316%,

---

<sup>15</sup> See TS Reply Narr. at III.H-13 ("In addition, to minimize the adverse effects of autocorrelation, all movements to a given plant destination were combined (on a weighted-average basis) into a single data point . . .").

and weighted-average miles ranged from 154.6 to 1,546.3.<sup>16</sup> In contrast, the origin-destination specific data used in the MMM model represents a different traffic group and has a different range of R/VC ratios and mileage values, with R/VC ratios ranging from 107% to 590% and mileages ranging from 112.3 miles to 1,793 miles.<sup>17</sup> In other words, the data used in the MMM model, and what BNSF attempts to adjust in its normalization process, has a wider range of values than the set used to develop the regression equation.

Another major flaw in BNSF's analysis is that it uses the regression to predict results for R/VC ratios that lie outside the relevant range of the observed data used in the regression analysis.<sup>18</sup> As is well known by statisticians, a regression is a poor predictor of the value of the dependent variable when the independent variable has values that fall outside the range of observed values.<sup>19</sup> Statisticians distinguish between interpolation, which denotes using values within the relevant range to make predictions, and extrapolation, which denotes using values outside the relevant range to make predictions. As explained by one statistician:

---

<sup>16</sup> See TS Reply e-workpaper "Regression Analysis\_RVC v Length of Haul.xls."

<sup>17</sup> See TS Reply e-workpaper "MMM Implementation Example.xls."

<sup>18</sup> BNSF is well aware of this fact since BNSF made the same argument in rejecting a regression used by the shipper in the Otter Tail proceeding. See BNSF Reply evidence in Otter Tail Power Company v. The Burlington Northern and Santa Fe Railway Company, STB Docket No. 42071 (Public Version filed Oct. 3, 2003) at page III.A-77 ("BNSF Otter Tail Reply").

<sup>19</sup> See G.S. Maddala, Introduction to Econometrics 487 (2d ed. 1992) and NIST Handbook § 4.1.4.1.

In general, the extrapolation of a regression equation to data that are outside the range over which the equation was estimated runs increased risks of large forecasting errors and incorrect conclusions about population values.<sup>20</sup>

It is generally understood that even in situations where it is appropriate to interpolate, it will be inappropriate to extrapolate. Moreover, the further outside the relevant range one seeks to predict by extrapolation, the greater the uncertainty in the prediction. The ICC had recognized that “[a]pplying regression results to circumstances outside the relevant range of data upon which the regression equations are based may not produce valid results.”<sup>21</sup>

The range of O/D specific R/VC ratios and mileage values used as the basis for the data in the MMM model is larger than the range of data BNSF used to develop its regression as shown above. For this reason alone, BNSF’s results must be considered invalid. BNSF’s improper extrapolation is further compounded because all of the R/VC ratios for the issue movements lie outside the range of the R/VC ratios used in BNSF’s regression equation. As shown in BNSF’s own example, the R/VC ratio in 1Q 2005 for the movement to LRS ranged from 429% to 590%, yet BNSF attempts to apply regression

---

<sup>20</sup> See BNSF Otter Tail Reply at III.A-78 (citing A. H. Studenmund, Using Econometrics: A Practical Guide 230-32 (3d ed. 1996)).

<sup>21</sup> See National Railroad Passenger Corp. and Consolidated Rail Corp. – Application Under Section 402(a) of the Rail Passenger Service Act for an Order Fixing Just Compensation, 10 I.C.C.2d 863, 877 (1995).

results developed using a data set with a maximum R/VC ratio of 316%.<sup>22</sup> Even if BNSF's reasons for the adjustment were valid, which they are not, it would be an error to make BNSF's proposed adjustments based on its improper extrapolation of the regression data.

**(iv) Variable Cost Adjustments**

In Major Issues, the STB directed parties to develop the R/VC ratios used in the MMM model using unadjusted URCS Phase III variable costs.<sup>23</sup> Contrary to the STB's specific instructions, BNSF's normalization factor explicitly adjusts the variable costs used in the MMM model. It does this by dividing each movement's R/VC ratio by the normalization ratio discussed above.<sup>24</sup> BNSF confirms that it improperly adjusts the URCS Phase III variable costs by including in its analysis "Normalized VC," which equals each movement's aggregate URCS Phase III variable cost multiplied by the movement's normalization ratio.<sup>25</sup>

---

<sup>22</sup> BNSF excluded the movements to LRS from its regression analysis.

<sup>23</sup> See Major Issues at 14 ("Under this method, the parties should use unadjusted URCS to estimate the variable cost of each movement in the traffic group . . .").

<sup>24</sup> See TS Reply e-workpaper "MMM Implementation Example.xls," sheet "Sheet1," column N.

<sup>25</sup> See TS Reply e-workpaper "MMM Implementation Example.xls," sheet "Sheet1," column V.

**(v) Consistency of Results with  
the Long-Cannon Factors**

In deciding to switch from the percentage reduction methodology to the MMM approach, the STB specifically took the Long-Cannon factors into consideration. The STB stated in Major Issues that, “the [MMM] reflects the important principle that a railroad should recover as much of its costs as possible from each shipper served before charging differentially higher rates to its captive shippers.” Id. at 16. To this end, MMM maximizes the amount of contribution from competitive shippers, before seeking additional revenue from the captive shippers.

BNSF’s normalization adjustment would turn the Long-Cannon factors on their collective head, and, in some cases, reduce rates on some of the most demand elastic shippers, while offering no rate reduction on movements with higher R/VC ratios.<sup>26</sup> Indeed, on longer-haul movements, BNSF’s normalization approach reduces the movements’ variable costs and raises their R/VC ratios for use in the MMM model, while on short-haul movements it raises the variable costs and lowers the R/VC ratios. The impact is that long-haul movements with low R/VC ratios receive rate reductions, while high R/VC ratio short-haul movements receive no reduction in their rates.

---

<sup>26</sup> Inherent in BNSF’s normalization argument is the presumption that long-haul movements exhibiting R/VC ratios well below the 180% jurisdictional threshold level are demonstrably being overcharged by BNSF.



TS Rebuttal Table III-H-4 below illustrates this problem with data from BNSF's normalized MMM implementation example.

<b>TS Rebuttal Table III-H-4</b> <b><u>BNSF's Normalized MMM Treatment of Long and Short-Haul Movements</u></b>				
<u>Movement Origin-Destination</u> (1)	<u>Miles</u> (2)	<u>Actual R/VC</u> (3)	<u>Normalized R/VC Used In MMM</u> (4)	<u>R/VC After MMM Rate Reduction</u> (5)
<b><u>Low R/VC Moves With Rate Reductions</u></b>				
1 { }	1,430	141%	146%	120%
2 { }	1,409	124%	132%	116%
3 { }	1,539	126%	126%	123%
4 { }	1,793	134%	146%	114%
<b><u>High R/VC Moves Without Rate Reductions</u></b>				
5 { }	141	240%	112%	240%
6 { }	174	211%	112%	211%
7 { }	236	192%	123%	192%
Source TS Reply e-workpaper "MMM Implementation Example.xls"				

As TS Rebuttal Table III-H-4 above shows, BNSF's normalization process produces absurd results. Long-haul movements with low R/VC ratios receive rate reductions, while short-haul movements continue at their existing rate levels.

The Long-Cannon factors ensure that highly competitive traffic bears its full burden of unattributable costs based on its level of demand elasticity, and that it not

be cross-subsidized by more demand inelastic captive traffic. It is obvious that BNSF has completely disregarded these factors in its MMM normalization process, and instead seeks to have short-haul, captive traffic cross-subsidize lower rated, competitive movements.

#### **4. Maximum Rates**

BNSF makes the following objections to WFA/Basin's procedures for calculating maximum relief and refunds on the issue traffic: (a) the Board should not award any reparations for time periods prior to the service date of the September '07 Decision; (b) the prescription time period should be 10 years, not 20 years; (c) the relief WFA/Basin ask for is excessive; and (d) the Board should prescribe mine-specific SAC rates, not an average SAC rate for all PRB mine origins served by the revised LRR. The Board should not adopt any of these proposals for the reasons set forth below.

##### **a. Reparations Time Period**

WFA/Basin challenge tariff rates that went into effect on October 1, 2004. BNSF claims that the Board should not award any reparations on shipments moving under the assailed tariffs between October 1, 2004 and September 10, 2007, the service date of the September '07 Decision. As discussed in Part I-A, BNSF's claims are predicated upon a misreading of governing law. Where, as here, BNSF has utilized its monopoly power to extract rates that exceed a reasonable maximum, the party paying those rates is entitled, as a matter of law, to reparations.

The equities here also support the requisite legal conclusion. BNSF is a major corporation that is reporting record profits and earnings. In 2007, BNSF's revenues totaled \$15.8 billion and its profits exceeded \$1.8 billion. See BNSF 2007 Form 10-K at 16. On the other hand, the ultimate payors of the rates at issue here are the customers served by LRS. The LRS service area is largely rural, and the customer base is dominated by small residential consumers, many of whom have incomes at or below the poverty line. See WFA/Basin Opening Narr. at IV-A-8. These consumers must be permitted to recover the amounts BNSF unlawfully extracted from them.

**b. Prescription Time Period**

BNSF asks the Board to enter a prescription that lasts only ten years. Like many of BNSF's other requests, this request conflicts with the Board's directives in Major Issues and this case. In Major Issues, the Board concluded that the prescription period in this case would be twenty years. Id. at 76. The Board adopted this ruling in both its November '06 Decision and in its September '07 Decision. WFA/Basin have complied with these clear Board directives in presenting their supplemental evidence. The Board must reject BNSF's request to relitigate this settled issue. See September '07 Decision at 20 (Board will not permit parties to litigate issues not related to the reconfiguration of the LRR).

As the Board knows, the prescription period corresponds to the DCF period. See Major Issues at 64-65. It is possible WFA/Basin may have modeled a different

SARR for a 10-year DCF period as opposed to a 20-year period and WFA/Basin clearly would have modeled a different peak year. Imposing a 10-year prescription period would be unfair to WFA/Basin because it would retroactively change a key input into the determinations used to revise the LRR.

Moreover, the reasons offered by BNSF in support of its request for a 10-year prescription period are also wrong. Specifically, BNSF suggests that a change in the prescription period is warranted because WFA/Basin's original case was structured to accommodate twenty years of traffic growth, while WFA/Basin's revised case is not encumbered by as much growth in traffic or extra infrastructure to accommodate the expected growth. BNSF also contends that there is even more turmoil now in coal shipment growth forecasts than at the time Major Issues was decided, and that forecast uncertainty warrants a shift in prescription periods. See TS Reply at III.H-23.

As demonstrated below, contrary to BNSF's statement, the growth pattern in WFA/Basin's TS evidence is virtually the same as the growth in their original case. Also, like their original case, WFA/Basin constructed their SARR with sufficient infrastructure to accommodate growth over the entire 20-year prescription period. To truncate any prescription to ten years would saddle the SARR with excess capacity, which under the MMM process, has a significant impact on SAC rates. Also, BNSF's contention that there is even more turmoil now in forecasting that would warrant a shift in

prescription periods exaggerates its evidence. Finally, a 20-year DCF period is necessary since it is needed to capture the full impact of taxes in the All CAPM scenario.

**i. Traffic Growth Patterns**

BNSF maintains that the concern that WFA/Basin's case would be prejudiced by a shift to a 10-year prescription is no longer pertinent because the vast majority of the LRR's traffic growth will occur in the first ten years of the revised LRR's operations. See TS Reply Narr. at III-II.23. In particular, BNSF argues that while the LRR's traffic will grow by approximately 11% between 2004 and 2024, the vast majority of the growth is in the first ten years, with the growth in traffic in the 2014 to 2024 time period equaling only two percent in the aggregate. BNSF posits that such low growth in the out years in part justifies the truncated prescription period.

BNSF does not acknowledge that the traffic growth pattern in WFA/Basin's TS evidence is virtually the same as the growth pattern in its Opening evidence. TS Rebuttal Table III-H-5 below compares the cumulative traffic growth in the first and second 10-year periods from WFA/Basin's Original case and its TS case.

<b>TS Rebuttal Table III-H-5</b> <b><u>Comparison In LRR Traffic Growth Forecasts</u></b>		
<b>Commutative</b> <b><u>In Traffic</u></b> <b>(1)</b>	<b>WFA/Basin</b> <b><u>Original Case</u></b> <sup>1'</sup> <b>(2)</b>	<b>WFA/Basin</b> <b><u>TS Case</u></b> <sup>2'</sup> <b>(3)</b>
1 2004 to 2014	10 %	9 %
2 2014 to 2024	3 %	2%
<hr/> <sup>1'</sup> Source: "LRR Traffic and Revenues WFA Basin Supplemental ATC 022207.xls" <sup>2'</sup> Source: "S1B LRR Traffic and Revenues_ModifiedSAC_Opening_1_CAPM.xls"		

TS Rebuttal Table III-H-5 above shows that the growth rate for the LRR traffic in WFA/Basin's original traffic group is virtually the same as in their TS traffic group for all time periods. The STB expressly rejected imposing a 10-year prescription period on WFA/Basin because, in part, it expected growth in traffic. Thus, imposing a 10-year prescription period on WFA/Basin's revised case would have the same prejudicial impact.

**ii. Changes in SAC**

Along with failing to acknowledge similarities in growth patterns between WFA/Basin's original and TS traffic groups, BNSF also underestimates the impact that changes in SAC would have on MMM rates. BNSF infers that since the reconfigured LRR is smaller than the original, it does not possess as much excess capacity in 2014, the

mid-point of the 20-year DCF period, and presumably would not be harmed by the 10-year cut-off.<sup>27</sup>

BNSF's contention is defective for several reasons. First, no matter the extent of the excess capacity and infrastructure at the mid-point of the 20-year analysis period, the simple fact is that the SARR contains excess costs that would not be present if WFA/Basin had constructed a SARR explicitly for a 10-year period. These excess costs would impact the final SAC results, and therefore, by definition, would be prejudicial to WFA/Basin.

Second, any changes in SAC are magnified by the STB's MMM process. The STB's abandoned percent reduction method responded to changes in SAC in an almost linear manner. A 1% increase in SAC, while holding revenues constant, would reduce the percent reduction by nearly the same 1%. This is not the case with the MMM process. A 1% increase in SAC could produce a larger than proportional increase in the SAC rate. Similarly, a 1% decline in SAC, could lead to a larger than proportional decline in the SAC rate because unlike the percent reduction method, not all shipments receive a rate reduction under the MMM process. This means that changes in SAC are magnified for those shippers that do receive rate reductions.

---

<sup>27</sup> See TS Reply at III.H-23. As the STB pointed out in its Major Issues decision, shippers in SAC proceedings build their SARR's with excess capacity in the beginning years to accommodate growth in the later years. Id. at 63. WFA/Basin took this approach in their TSO evidence, and built in excess capacity in their system to handle growth in later years.

To illustrate this point, WFA/Basin have calculated the impact of decreasing the SAC by 2% in each period on their TSO MMM rates.<sup>28</sup> As shown in TS Rebuttal Table III-H-6 below, the results are not close to being linear.

<b>TS Rebuttal Table III-H-6</b> <b><u>Impact On MMM Rates Due To A Two Percent Decline In SAC</u></b>			
<u>Year</u>	<u>MMM Rate</u>	<u>MMM Rate With</u>	<u>Percent Change</u>
(1)	<u>TS Open <sup>1</sup></u>	<u>Reduced SAC <sup>2</sup></u>	<u>In Rates <sup>3</sup></u>
	(2)	(3)	(4)
1 2004	\$2 82	\$2 72	-3 5 %
2 2005	\$2 57	\$2 48	-3.5 %
3 2006	\$2 48	\$2 38	-4 0%
4 2007	\$2 54	\$2 45	-3 5%
5 2008	\$2 61	\$2 51	-3 8%
6 2009	\$2 54	\$2.44	-3 8 %
7 2010	\$2 59	\$2.50	-3 7 %
8 2011	\$2 62	\$2 52	-3 7 %
9 2012	\$2 67	\$2 57	-3.7 %
10 2013	\$2 72	\$2.62	-3 7 %
11 2014	\$2 80	\$2 69	-3.7 %
<sup>1</sup> Source: "MMM Model Linked to III-II-1 with CAPM VC.xls" <sup>2</sup> Source: "Impact of adjusting SAC On MMM Results.xls" <sup>3</sup> [Column (3) - Column (2)] - 1			

---

<sup>28</sup> To perform this analysis, WFA/Basin used their TSO e-workpaper "MMM Model Linked to III-II-1 With CAPM VC.xls," and reduced the SAC for each period between 2004 and 2014 by 2%. See TS Rebuttal e-workpaper "Impact of adjusting SAC On MMM Results.xls."



TS Rebuttal Table III-H-6 above illustrates the impact that a 2% decline in SAC can have on the rate reduction process. While SAC declined by 2% in each period, MMM rates declined anywhere from 3.5% to 4.0% in each period.

The changes shown above are not insignificant when one considers WFA/Basin's coal volumes. In 2014 for example, a 2% decline in SAC would provide WFA/Basin an additional \$0.11 reduction in rates, not considering jurisdictional thresholds. At an expected coal volume of 8.1 million tons forecasted to be shipped in that year, this translates to nearly \$1 million in additional relief.

BNSF blithely infers that any excess costs incurred by WFA/Basin for constructing a railroad to handle twenty years of growth is minimal. As the above example illustrates, any change in the SAC can have a significant impact on the MMM result.

### **iii. Alternative Forecast Scenarios**

BNSF argues that the reasons the STB chose to switch from a 20-year to a 10-year prescription period, which included changed circumstances that arise over long periods and the unreliability of long-range forecasts, have become even stronger than when the Board's decision in Major Issues was served in 2006. BNSF opines that this uncertainty makes it unwise to lock in a transportation rate for such a long period in the face of such likely market turmoil. See TS Reply Narr. at III.H-23. As support for its claim, BNSF points towards the EIA's recent coal production forecasts, and the inclusion

of different scenarios which incorporate the impact of so-called greenhouse gas legislation.

However, as the statistical arm of the Department of Energy, the EIA is always producing alternative forecast scenarios. For example, in WPL the defendant railroad, the UP, included several different EIA scenarios in its SARR traffic forecast, one of which included the impact of regulations of greenhouse gases. Id. at 970-71. In fact in every AEO, the EIA includes multiple scenarios, some high and some low. Thus, there is no greater indication of market turmoil than existed when the STB directed the parties to continue to use a 20-year prescription period.

Finally, BNSF's assertions here are inconsistent with what its executives are telling Wall Street. At its Financial Analysts' Meeting on March 6, 2008 in Fort Worth Texas, BNSF's senior coal marketing executive concluded that "demand outlook for PRB Coal remains positive."<sup>29</sup>

#### **iv. Taxes**

In Major Issues, one of the reasons the STB gave for truncating future SAC analyses to ten years was that a 20-year analysis was not necessary to address taxes. The STB reasoned that in all of its recent cases, the hypothetical SARR would have begun

---

<sup>29</sup> See Financial Analysts' Meeting, March 6, 2008, Fort Worth, Texas at slide 28 (presented by Steve Bobb, BNSF's Group Vice President – Coal) included as TS Rebuttal e-workpaper "Bobb Presentation.pdf."

paying full taxes within ten years of the base year, and extending the analysis period had no practical impact.<sup>30</sup>

While that may have been true in prior SAC cases, the same cannot be said for the instant case. As shown in WFA/Basin's IS Rebuttal e-workpaper "Exhibit\_III-H-1 Reb.xls," which contains WFA/Basin's TS Rebuttal DCF model, the LRR does not start paying full taxes until the year 2016. In other words, its tax credits and carryforwards are not exhausted until year 12 of the DCF period. If the STB were to truncate the analysis period, WFA/Basin would lose the benefit of these still unexhausted tax credits.<sup>31</sup>

**c. Amount of Relief**

BNSF claims that the relief WFA/Basin seek here is "outlandish" and not reflective of "commercial" realities. See TS Reply at I-5. WFA/Basin are not seeking "outlandish" relief. The reason why WFA/Basin request significant relief is because BNSF is extracting rates that are substantially higher than the maximums permitted under STB standards. BNSF points to no other coal shipper in the west that is paying rates that exceed BNSF's service costs by over 500%. BNSF vociferously defends its pricing on grounds that it is a monopolist and has the market power to charge huge mark-ups over its costs on the LRS traffic. WFA/Basin do not dispute BNSF's "commercial" market

---

<sup>30</sup> See Major Issues at 62 wherein the STB cited to Otter Tail, Xcel, CP&L and TMPA as the cases in which tax credits would be exhausted by year 10.

<sup>31</sup> BNSF's TS Reply e-workpapers also show that the LRR's tax credits will not be exhausted by 2014. See TS Reply e-workpaper "Copy of FTI DCF CAPM.xls."

power, they, and the consumers they represent in these proceedings, have been the victims of that power.

The Board's Coal Rate Guidelines are intended to protect captive coal customers like WFA/Basin from being forced to pay prices based on the "commercial" market power of monopoly railroads. The Board's SAC test, which WFA/Basin have invoked in this case, is one of the Guidelines' four constraints on monopoly pricing abuses. The SAC constraint calls for the establishment of maximum rates that would apply in a contestable "competitive" market. See September '07 Decision at 8. In competitive markets, prices reflect reasonable mark-ups over the competitors costs (for the efficient competitors), not monopoly based profit mark-ups. See Major Issues at 7 ("contestable markets have competitive characteristics which preclude monopoly pricing").

WFA/Basin's application of the SAC test produces maximum rates that are reflective of cost-based rates one would expect to see for a new, efficient entrant having a large traffic base of PRB coal. The average maximum rates on the WFA/Basin SAC traffic approximate 200% of BNSF's variable costs.<sup>32</sup> These results are in line with other major coal rate case decisions where shippers have obtained rate relief. See, e.g., KCPL (Board prescribes maximum rates on captive PRB coal traffic at 180% of the defendant carrier's variable costs); WPL (Board prescribes maximum rates on captive PRB coal

---

<sup>32</sup> See TS Rebuttal e-workpaper "MMM linked to III-H-1 Reb.xls."

traffic at 180% of defendant carrier's variable costs); TPA (Board prescribes maximum rates on captive PRB coal traffic at 193% of defendant carrier's variable costs); Xcel (Board prescribes maximum reasonable rates on captive PRB coal traffic at 252% of the defendant carrier's variable costs).

Rates at the levels WFA/Basin request the Board to prescribe also provide far more generous returns to BNSF than those the BNSF collects from the vast majority of its customers. For example, BNSF's 2006 system-average R/VC ratios approximate 134%<sup>33</sup> which is more than BNSF needs to be deemed revenue adequate under the Board's standards.<sup>34</sup> Rates set at the levels WFA/Basin ask the Board to prescribe also provide BNSF with very generous revenue contributions. At the prescribed rate level, WFA/Basin will pay BNSF approximately \$500.4 million over the 20-year DCF period, of which \$251.7 million is contribution in excess of BNSF's variable service costs for providing the move.<sup>35</sup> Contributions at these levels place WFA/Basin in the top tier of BNSF's overall customer base.

**d. Use of Average Rates**

In their Opening evidence, WFA/Basin developed a single average maximum rate to apply from all PRB mines served by the revised LRR. As WFA/Basin

---

<sup>33</sup> See TS Rebuttal e-workpaper "BNSF Average 2006 RVC.xls."

<sup>34</sup> See Railroad Revenue Adequacy – 2006 Determination, STB Ex Parte No. 552 (Sub-No. 11) (STB served May 6, 2008).

<sup>35</sup> See TS Rebuttal e-workpaper "MMM linked to III-H-1 Reb.xls."

have previously demonstrated, use of a single average rate is consistent with Board precedent and addresses WFA/Basin's concerns that BNSF singled out shipments from the WFA-owned Dry Fork Mine for especially high rates. See WFA/Basin Reply Narr. at III-H-41-42.

BNSF maintains that the Board should abandon its consistent past practice of prescribing a single average SAC rate because the use of a single average SAC rate (i) "would distort the MMM results;" (ii) would create an impermissible mismatch between the WFA/Basin's forecasted and actual coal shipping patterns; (iii) would "open the door to abuse" if WFA/Basin purchases less coal than forecasted from southern PRB mines; (iv) would result in SAC rates below the jurisdictional threshold; and (v) would "substantially inflate" WFA/Basin's reparation claims. See TS Reply Narr. at III-H-4-8. Each assertion is wrong.<sup>36</sup>

**i. Proper MMM Procedures**

BNSF asserts that the prescription of a weighted-average rate distorts the results of the MMM process by not basing rates on movement specific variable costs. See TS Reply Narr. at III.H-5. BNSF's assertion is incorrect. In fact, application of anything other than a single rate weighted on the tons used in the MMM analysis would amount to

---

<sup>36</sup> A review of BNSF traffic data used to develop SARR revenues in this proceeding also shows that BNSF uses average rates from PRB mines on the vast majority of its movements. See TSO e-workpaper "STB LRR Traffic and Revenues\_ModifiedSAC\_Opening\_1\_CAPM.xls," worksheet "SARR Traffic\_2005."

dismissal of the MMM results. This is because the allocation of tons among SARR movements directly affects the MMM results. Therefore, the MMM results must be applied based on that allocation. If the MMM results were adjusted based on an *ex post* allocation of tons, the MMM results would no longer be consistent with the SAC, and would produce inaccurate results. In simple terms, calculation of the MMM rates is dependent on how tons are distributed among mine origins. Changing how tons are distributed will also change the MMM rates. BNSF cannot accept WFA/Basin's allocation of SARR tons for purposes of calculating maximum reasonable rates under MMM if it does not apply the weighted-average rate based on the same allocation.

The allocation of volumes among origin mines, and the variable costs associated with those volumes, directly affect the outcome of the MMM analysis. The MMM methodology calculates the maximum permissible R/VC ratio for all SARR movements based on the collective variable costs associated with those movements and the total SAC requirement. The SAC requirement itself is a function of the SARR's traffic volumes as both operating SAC and investment SAC are determined, in large majority, by the distribution of traffic on the system.

A simple example clearly demonstrates this fact. Page 1 of TS Rebuttal Exhibit III-H-2 contains a portion of the MMM results from WFA/Basin's TSO evidence for 1Q05. In that period, the total SAC requirement equaled \$44,444,818, while the aggregate URCS variable cost for the LRR traffic group, determined in large part by the

distribution of coal between origin mines, equaled \$27,841,390. See TS Rebuttal e-workpaper “Reallocation Exhibit.xls.” Application of the SAC and variable cost figures in the MMM model resulted in a starting R/VC ratio benchmark of 159.6%, a post-iteration R/VC ratio of 192.2%, and a weighted-average MMM rate of \$2.43 per ton.<sup>37</sup> As BNSF notes, the weighted-average rate of \$2.43 per ton is below the mine specific rate for the Dry Fork Mine to LRS movement of \$2.96 per ton. See TS Reply at III.H-7-8. BNSF concludes that this is proof that using a weighted-average rate distorts the MMM results.

However, if the 1Q05 tons were reallocated such that 90% of the volume assumed to move to LRS from Antelope Mine were shifted to the Dry Fork Mine, the MMM analysis would change completely as shown on Page 2 of TS Rebuttal Exhibit III-H-2. Redistribution of the traffic would increase aggregate variable costs by \$451,529 to \$28,292,919.<sup>38</sup> The SAC requirement would also change since SAC is partially a function of distribution of coal on the SARR system. If the SAC were assumed to increase at a rate consistent with the incremental change in variable costs, the resulting revised estimated SAC would be  $\$44,444,818 + \$451,529 = \$44,896,347$ .<sup>39</sup> These

---

<sup>37</sup> See TSO e-workpaper “MMM Model Linked to III-H-1 with CAPM VC.xls.”

<sup>38</sup> See TS Rebuttal e-workpaper “Reallocation Exhibit.xls.” This is due to more tons moving between an O/D pair with higher variable costs.

<sup>39</sup> This example does not infer that WFA/Basin believe that SAC would change directly in proportion with changes in URCS variable costs, but for this hypothetical example, it works as a convenient substitute.



changes result in a starting MMM R/VC ratio benchmark of 158.7%, a post-iteration maximum R/VC ratio of 188.9%, and a movement-specific rate for the Dry Fork to LRS movement of \$2.91 per ton.<sup>40</sup> While there were more tons moving from the higher cost Dry Fork Mine under this scenario, the MMM rate for the movement declined by \$0.05 per ton. In other words, moving more tons from the Dry Fork Mine decreased its mine-specific rate.

In its attempt to rely on one distribution of tons for calculation of the LRR's SAC, and a different distribution of tons for application of those rates after the MMM process, BNSF is attempting to have its cake and eat it too. The rate BNSF seeks to impose on the Dry Fork to LRS movement is demonstrably well below the rate that would be prescribed for that movement if the MMM analysis relied on the distribution BNSF claims (without any support) actually moved in 1Q05.

Were mine-specific rates to be applied, any change in volume allocation among mines from the allocation used to develop the MMM rates would necessitate a re-running of the MMM model to ensure accurate mine-specific rates were being applied. This is obviously impractical. The more practical alternative is to use a weighted-average rate that reflects the assumptions upon which the development of that rate relies, as WFA/Basin have consistently requested.

---

<sup>40</sup> See TS Rebuttal c-workpaper "1Q2005 Reallocation Example.xls."

**(ii) Shipping Patterns**

BNSF claims that WFA/Basin's averaging process is flawed because WFA/Basin's coal shipping patterns may change from the shipping patterns WFA/Basin used to forecast how WFA/Basin would transport coal using the revised LRR. The Board has never imposed a requirement that the issue traffic forecast used for SAC purposes match actual real-world mine-to-plant delivery patterns and should not do so here.

In developing its LRS tonnage forecast for the LRR, WFA/Basin relied upon a coal budget forecast produced in the normal course of business by WFA/Basin. Specifically, WFA/Basin relied on the 2005 "Laramie River Station Tonnage Requirement/Delivery/Cost Budget Schedule"<sup>41</sup> that WFA/Basin use for fuel delivery planning. These data were not prepared to support any litigation strategy, but rather to help WFA/Basin plan their annual operations at the three LRS units.

The Board has consistently shown a preference for data prepared for normal business purposes rather than data prepared specifically for litigation. See Duke/CSX at 14 ("Evidence that was prepared in the ordinary course of business is generally preferred over evidence that is developed specifically for litigation."). As BNSF has offered no evidence that WFA/Basin's internal business forecast is flawed, it must be accepted as the best evidence of what will happen in the future.

---

<sup>41</sup> See WFA/Basin hardcopy workpaper WFA/Basin 01309.

More importantly, BNSF accepts WFA/Basin's traffic forecast, including volume distribution among PRB mines, for all other purposes in this case. BNSF has accepted WFA/Basin's traffic group and traffic forecast without any adjustment for purposes of calculating SARR expenses, SARR movement revenues, SARR revenue divisions, and SARR traffic variable costs. BNSF offers no explanation why WFA/Basin's distribution assumptions were appropriate for every other purpose in this case except the application of the prescribed rate. This is a non sequitur. The STB must use the weighted-average rate to retain consistency throughout the entire SAC analysis, i.e., from traffic selection through prescribed rate application.

Although BNSF is critical of the volume distribution WFA/Basin used for the LRS traffic forecasts, it offers no alternative distribution. Based on (1) the fact that the volume distribution determines the MMM results, (2) there being no proposed alternate LRS forecast in the record, and (3) both parties' endorsement of the distribution for all other purposes in this proceeding, there is no other alternative than to use the WFA/Basin distribution throughout the SAC analysis, including the application of the prescribed rate.

**iii. Impact on BNSF**

BNSF's objection to the use of a weighted-average rate for coal originating at all PRB mines is that it will produce what BNSF terms "improperly preferential rates" from movements with variable costs above the weighted-average variable cost for the

issue traffic. See TS Reply Narr. at III.H-5. This would occur, according to BNSF, at northern PRB mines that have variable costs of service higher than the average variable costs for movements from the southern PRB mine origins, and could allow WFA/Basin to achieve “illegitimate additional reductions” in the rates for northern and central PRB mines. See TS Reply Narr. at III.H-7.

BNSF’s objection that a weighted-average rate will provide low rates to higher-cost mines focuses on only one-half of the equation. While the use of an average rate will provide marginally better rates from certain mine origins in the northern PRB, it will also charge movements from southern PRB origins with higher rates than would be dictated by the use of origin-specific rates. BNSF’s TS Reply Narrative clearly shows the impact on shorter movements of using an average rate as seen in TS Reply Table III.H-2, which shows that the movement from the Antelope Mine to LRS would increase by 22%.<sup>42</sup>

---

<sup>42</sup> BNSF’s TS Reply Table III.H-2 attempts to understate the impact on shipments from southern PRB mines while overstating the benefits WFA/Basin may allegedly gain from shipments from other mines by using some mathematical sleight of hand. To calculate its “Difference From Weighted-Average MMM Rate” shown in its Table III.H-2, BNSF divided the mine-specific rate by the weighted-average rate and subtracted 1. For example, for the movement from Caballo Rojo, BNSF divided the movement-specific rate of \$2.62 per ton by the weighted-average rate of \$2.43 per ton and subtracted 1 to develop its 8% difference. Likewise, on the movement from the Antelope Mine, BNSF states the difference is only 18%, which it calculated by dividing the Antelope rate of \$2.00 per ton by the \$2.43 per ton weighted-average rate, and subtracting 1. However, the proper comparison is the percent change between the mine-specific rates and the weighted-average rate. For example, movements from the Antelope Mine would experience a 21.5% increase in rates by switching from mine-specific to weighted-

Moreover, as discussed above, BNSF has offered no evidence that WFA/Basin's shipping patterns, over time, will be significantly different from those contained in the forecasts prepared in the ordinary course of business. Stated another way, there is no evidence that WFA/Basin will fundamentally alter their projected shipping patterns in order to maximize deliveries in the manner speculated by BNSF.

**iv. Jurisdictional Threshold**

BNSF claims that the use of a weighted-average rate for all movements runs the risk of setting a SAC rate below the jurisdictional threshold level for movements with relatively high mine-specific variable costs. See TS Reply Narr. at III.H-8. As support for its claim, BNSF compares WFA/Basin's weighted-average SAC rate for 4Q04 to the jurisdictional threshold rates for two mines for the same period based upon what BNSF terms the "agreed variable costs." Id. BNSF believes that this demonstrates that rates for these mines would be set below their jurisdictional threshold level. This is incorrect.

TS Rebuttal Table III-H-7 below shows that the movement from Eagle Butte mine had the highest jurisdictional threshold rate on a mine-specific basis at \$2.77 per ton. This rate is below the \$2.99 per ton SAC rate WFA/Basin determined for this period. BNSF incorrectly compares rates developed using CAPM cost of capital to jurisdictional threshold rates developed with single-stage DCI<sup>2</sup> cost of capital.

---

average rates (i.e.,  $(\$2.00 - \$2.43) \div \$2.43 = 21.5\%$  increase). Similarly the movement from Caballo Rojo would only receive a 7.3% decrease and not the 8% inferred by BNSF.

BNSF also attempts to compare the jurisdictional threshold rate for the movement from the Caballo Rojo mine in 4Q04 to the MMM rate in 2006. Once again BNSF improperly compares a jurisdictional threshold rate developed using a single-stage DCF URCS variable cost to a maximum rate that used CAPM variable cost. BNSF states that the jurisdictional threshold rate in 4Q04 for the movement from the Caballo Rojo mine is equal to \$2.57 per ton, but the SAC rate in 2006 is \$2.48 per ton. As TS Rebuttal Table III-H-7 below shows, though, the correct jurisdictional threshold rate for the Caballo Rojo move is \$2.43 per ton, which is once again below the SAC rate.<sup>43</sup>

**v. Reparations**

BNSF claims that WFA/Basin's use of an average rate produces an over-recovery of reparations in the first quarter of 2005. BNSF attempts to support its claim by comparing the 1Q05 SAC rate for individual mine origins to the weighted-average SAC rate for the same time period. According to BNSF, WFA/Basin's actual shipments in 1Q05 "were more heavily weighted to northern and central mines" than was assumed by WFA/Basin for purposes of the SARR's traffic. See TS Reply Narr. at III.H-21. This produces a purported over-recovery since, under BNSF's calculations, if mine-specific SAC rates had been applied, the reparations would have been less.

---

<sup>43</sup> While WFA/Basin have requested that the Board prescribe an average maximum MMM rate on the issue traffic, WFA/Basin have also included, in both their TSO and TS Rebuttal electronic workpapers, mine-specific MMM calculations for each PRB mine served by the revised LRR.

BNSF's assertions are wrong. As discussed above, substituting actual delivery figures for forecasted delivery figures changes the MMM answers and undermines the entire MMM process. Moreover, as also discussed above, shipping patterns will of course deviate from forecasts and in some quarters the differences, from a rate prescription perspective, could help WFA/Basin and in others help BNSF. In any event, the results in one calendar quarter in a 20-year DCF analysis provide no reasoned basis for the Board to overturn years of consistent precedent calling for the prescription of a single average PRB SAC rate.

**e. 4Q04 Maximum Rates**

The maximum rates for BNSF service to LRS equal the greater of the stand-alone cost or the jurisdictional threshold. TS Rebuttal Table III-H-7 compares BNSF's 4Q04 rate levels (Column 2) to the 4Q04 jurisdictional threshold calculation (Column 4)<sup>44</sup> and the 4Q04 stand-alone costs (as calculated in this TS Rebuttal evidence, using CAPM equity costs in all time periods) (Column 5).

---

<sup>44</sup> Variable costs are calculated using CAPM. Sec Part II-A.

<b>TS Rebuttal Table III-H-7</b> <b>Summary of TSO Maximum Rate Calculations for Issue Traffic in 4Q04</b>					
<u>Origin</u> (1)	<u>BNSF Rate With Surcharge Per Ton</u> (2)	<u>BNSF Variable Cost Per Ton</u> (3)	<u>Jurisdictional Threshold Per Ton</u> (4)	<u>Stand-Alone Cost Per Ton</u> (5)	<u>Maximum Rate Per Ton</u> (6)
Dry Fork	\$ 6 71	\$1 53	\$2 75	\$2.99	\$2.99
Eagle Butte	6 72	1 54	2 77	2 99	2 99
Cordero	6 48	1 31	2.36	2 99	2 99
Caballo Rojo	6 53	1 35	2 43	2 99	2 99
Jacobs Ranch	6 25	1 22	2 59	2 99	2 99

WFA/Basin request that the Board prescribe maximum rates at the SAC levels shown on TS Rebuttal Table III-H-7.

**f. 4Q04 Reparations**

WFA/Basin have calculated the reparations they are due for overcharges incurred in the fourth quarter of 2004, using the SAC calculations set forth in WFA/Basin's TS Rebuttal evidence (with LRR capital costs determined using CAPM for all time periods). This amount equals the difference between the freight charges BNSF collected and the maximum permitted, plus applicable interest. These amounts are calculated in TS Rebuttal c-workpaper "WFA Reparations Third Supp Reb.xls" and equal \$7.2 million, exclusive of interest. WFA/Basin request that the Board order BNSF to pay this amount, plus applicable interest.

**g. Post-4Q04 Rates and Reparations**

WFA/Basin have developed the maximum SAC rates for periods after 2004 using the calculations set forth in this TS Rebuttal evidence for time periods starting in



the first quarter of 2005 through the third quarter of 2024. These calculations are shown in TS Rebuttal Table III-H-8 below:

<b>TS Rebuttal Table III-H-8 Maximum SAC Rates</b>	
<b>Period</b>	<b>Maximum Rate</b>
4Q04	\$2.99
2005	2.74
2006	2.64
2007	2.71
2008	2.78
2009	2.71
2010	2.77
2011	2.79
2012	2.84
2013	2.90
2014	2.98
2015	3.12
2016	3.19
2017	3.21
2018	3.24
2019	3.30
2020	3.35
2021	3.40
2022	3.46
2023	3.52
1Q-3Q2024	3.55

WFA/Basin request that the Board: (i) prescribe maximum rates equal to those set forth in TS Rebuttal Table III-H-8; (ii) direct the parties to calculate the jurisdictional threshold for all time periods using the costing procedures adopted in the

Board's September '07 Decision (with CAPM); (iii) order for all time periods that the maximum rates on the issue traffic equal the greater of the jurisdictional threshold or the maximum SAC rate; and (iv) award additional reparations, plus interest, to WFA/Basin for all payments made under rates that exceed the maximums calculated under (i), (ii), and (iii) above.

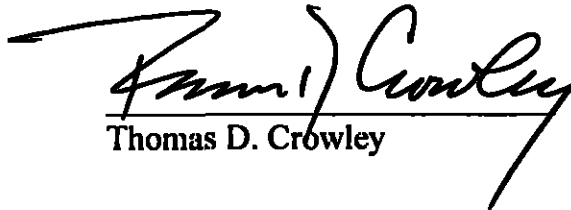


#### **IV. WITNESS QUALIFICATIONS AND VERIFICATIONS**

This Part contains the Verifications of WFA/Basin's witnesses who are verifying the sections referenced in their Verifications, and whose Statements of Qualifications, with the exception of Dr. James E. Hodder, appear in Part V of WFA/Basin's Opening, Reply or Rebuttal Narratives. Dr. Hodder's Statement of Qualifications appears below.

### **VERIFICATION**

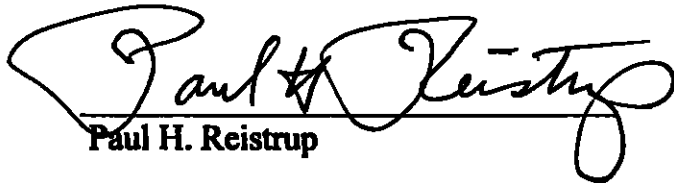
I, Thomas D. Crowley, verify under penalty of perjury that I am the same Thomas D. Crowley whose Statement of Qualifications appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence filed in this proceeding; that I am responsible for the portions of the foregoing Third Supplemental Rebuttal Evidence of WFA/Basin set forth in Parts II-A, III-A, III-G and III-H; and for the portion of Part III-C relating to the changes in operating inputs and the train file for purposes of the rebuttal supplemental RTC simulation, inputs and the train file for purposes of the supplemental RTC simulation, running the RTC Model for purposes of the rebuttal supplemental simulation, and the results of the rebuttal supplemental RTC Model simulation; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Thomas D. Crowley

Executed on: August 14, 2008

## **VERIFICATION**

I, Paul H. Reistrup, verify under penalty of perjury that I am the same Paul H. Reistrup whose Statement of Qualifications appears in Part V of the Narrative portion of the Opening Evidence of Complainants WFA/Basin in this proceeding; that I am responsible, along with Paul Smith, for the portion of the foregoing Third Supplemental Rebuttal Evidence of WFA/Basin related to the SARR system configuration and operating plan contained in Parts III-B and III-C and the portion of Part III-D related to SARR locomotive and railcar requirements and the Operating organization, personnel and expenses; and, along with Michael Kenyon, the SARR maintenance-of-way plan and related expenses contained in Part III-D; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

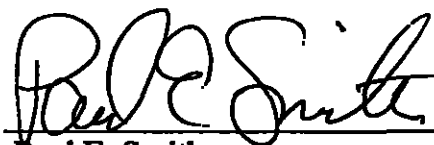


Paul H. Reistrup

Executed on: August 8, 2008

## **VERIFICATION**


I, Paul E. Smith, verify under penalty of perjury that I am the same Paul E. Smith whose Statement of Qualifications appears in Part V of the Narrative portion of the Opening Evidence of Complainants WFA/Basin in this proceeding; that I am responsible, along with Paul Reistrup, for the portion of the foregoing Third Supplemental Rebuttal Evidence of WFA/Basin related to the SARR system configuration and operating plan contained in Parts III-B and III-C and the portion of Part III-D related to SARR locomotive and railcar requirements and the Operating organization, personnel and expenses; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Paul E. Smith

Executed on: August 5, 2008

## **VERIFICATION**

I, Philip H. Burris, verify under penalty of perjury that I am the same Philip H. Burris whose Statement of Qualifications appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence in this proceeding; that I am responsible for the portion of WFA/Basin's Third Supplemental Rebuttal Evidence in this proceeding related to the development of equipment lease, maintenance and servicing costs (Parts III-D-1 and III-D-2), operating unit costs (Parts III-D-3 and III-D-4 through III-D-9) and compensation levels for all the SARR Transportation and Engineering crews, other operating employees, nonoperating (General and Administrative) personnel, and for training and recruiting costs (Part III-D-3); as well as the application of the SARR operating unit costs to the operating statistics, thus yielding the SARR operating expenses in the base year and evidence related to the development of the land value index for use in the DCF model (Part III-G); that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

A handwritten signature in black ink, appearing to read 'P. H. Burris', is written over a horizontal line.

Philip H. Burris

Executed on: August 14, 2008



### **VERIFICATION**


I, Michael D. Kenyon, verify under penalty of perjury that I am the same Michael D. Kenyon whose Statement of Qualifications appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence in this proceeding; that I am responsible, along with Paul Reistrup, for the portion of WFA/Basin's Third Supplemental Rebuttal Evidence in this proceeding related to the SARR maintenance-of-way plan and related expenses contained in Part III-D; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Michael D. Kenyon

Executed on August 7, 2008

## **VERIFICATION**

I, Harvey H. Stone, verify under penalty of perjury that I am the same Harvey H. Stone whose Statement of Qualifications<sup>1</sup> appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence in this proceeding; that I am responsible for the portion of WFA/Basin's Third Supplemental Rebuttal Evidence in this proceeding related to road property investment contained in Part III-F for the SARR; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Harvey H. Stone

Executed on: August 11, 2008

---

<sup>1</sup> Mr. Stone was previously employed by Stone Consulting, which has since been acquired by Transystems. Mr. Stone is now the Senior Assistant Vice President at Transystems.

### **VERIFICATION**

I, Charles A. Stedman, verify under penalty of perjury that I am the same Charles A. Stedman whose Statement of Qualifications appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence in this proceeding; that I am responsible for the portion of WFA/Basin's Third Supplemental Rebuttal Evidence in this proceeding, along with Mr. Stone, related to the roadbed preparation/earthworks components of the road property investment cost of the SARR, exclusive of culverts, roadbed specifications and yard drainage (Part III-F-2); that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Charles A. Stedman

Executed on: August 14, 2008

### **VERIFICATION**

I, Victor F. Grappone, verify under penalty of perjury that I am the same Victor F. Grappone whose Statement of Qualifications appears in Part V of the Narrative portion of WFA/Basin's Opening Evidence in this proceeding; that I am responsible for the portion of WFA/Basin's Third Supplemental Rebuttal Evidence in this proceeding, along with Mr. Stone, related to signals and communications contained in Part III-F-6; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

  
Victor F. Grappone

Executed on: August 14, 2008

**1. Dr. James E. Hodder**

Dr. James E. Hodder is the Charles and Laura Albright Professor of Finance at the University of Wisconsin-Madison. He has served on the faculty of the Wisconsin School of Business since 1992. From 1978 to 1992, he served on the faculty of Stanford University, where he received my Ph.D. in Economics in 1979. At Wisconsin, he has taught a masters-level Corporate Finance course as well as corporate-oriented courses on Financial Policy and on Multinational Business Finance. In addition, he has taught several courses on options and other derivative securities, at both introductory and advanced levels. At Stanford, most of his teaching was in corporate finance with a particular focus on valuing manufacturing and technology investments. Indeed, he has been teaching corporate finance courses over a period of 30 years. Dr. Hodder has also published extensively on investment evaluation. Dr. Hodder's curriculum vitae is attached as Appendix A to his TS Rebuttal Verified Statement, which is marked as Exhibit III-G-1.

In addition to his Verified Statement, Dr. Hodder is also sponsoring the portion of WFA/Basin's TS Rebuttal Narrative contained in Part III-G-d-iii.

I declare under penalty of perjury that I have read the WFA/Basin Third Supplemental Rebuttal Evidence that I have sponsored, as described in the foregoing Statement of Qualifications, and that the contents thereof are true and correct. Further, I certify that I am qualified and authorized to sponsor this testimony.

Executed on August 8, 2008

  
James L. Hodder

## **CERTIFICATE OF SERVICE**

I hereby certify that this 15th day of August, 2008, I served copies of the foregoing Third Supplemental Rebuttal Evidence of Complainants Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc. by hand delivery on designated outside counsel for BNSF, as follows:

Samuel M. Sipe, Jr., Esq.  
Anthony J. LaRocca, Esq.  
Linda S. Stein, Esq.  
Steptoe & Johnson, L.L.P.  
1330 Connecticut Avenue, N.W.  
Washington, D.C. 20036-1795

  
Peter A. Pfohl